

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|---------------------------------------|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| AKRON, OH | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.1 | 5.3 | 3.3 | 3.4 | 3.2 | 2.6 | 2.5 | 2.4 | 2.7 | 1.8 |
| SO ₂ | 2nd daily max | ns | 1 | 0.056 | 0.042 | 0.046 | 0.042 | 0.072 | 0.044 | 0.065 | 0.044 | 0.044 | 0.06 |
| | Annual mean | ns | 1 | 0.015 | 0.012 | 0.009 | 0.01 | 0.012 | 0.01 | 0.011 | 0.009 | 0.01 | 0.01 |
| Ozone | 2nd highest daily max | ns | 2 | 0.108 | 0.1 | 0.117 | 0.105 | 0.103 | 0.112 | 0.115 | 0.106 | 0.113 | 0.12 |
| | 4th highest daily max 8-h average | ns | 2 | 0.093 | 0.086 | 0.092 | 0.091 | 0.087 | 0.097 | 0.097 | 0.085 | 0.096 | 0.1 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 41.45 | 37.15 | 44.1 | 41.9 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 17.215 | 16.435 | 16.75 | 16.745 |
| ALBANY, GA | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 37.7 | 36.1 | 30.5 |
| | Weighted annual mean | NA | 1 | ND | 16.61 | 14.64 | 13.82 |
| ALBANY-SCHENECTADY-TROY, NY | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.8 | 5.2 | 4.3 | 3.7 | 4.5 | 4.4 | 4.2 | 2.9 | 2.4 | 3.4 |
| SO ₂ | 2nd daily max | down | 1 | 0.028 | 0.037 | 0.023 | 0.025 | 0.02 | 0.016 | 0.016 | 0.02 | 0.024 | 0.019 |
| | Annual mean | ns | 1 | 0.006 | 0.007 | 0.003 | 0.004 | 0.003 | 0.004 | 0.003 | 0.004 | 0.005 | 0.004 |
| Ozone | 2nd highest daily max | ns | 2 | 0.102 | 0.103 | 0.101 | 0.095 | 0.094 | 0.096 | 0.106 | 0.08 | 0.104 | 0.113 |
| | 4th highest daily max 8-h average | ns | 2 | 0.083 | 0.078 | 0.08 | 0.077 | 0.077 | 0.075 | 0.082 | 0.066 | 0.086 | 0.088 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | 25.3 | 32.1 | 33.65 |
| | Weighted annual mean | NA | 2 | ND | 10.54 | 10.685 | 10.91 |
| ALBUQUERQUE, NM | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 2 | 6.2 | 5 | 4.35 | 4.3 | 4.05 | 3.85 | 4.05 | 3.45 | 3.25 | 2.8 |
| NO ₂ | Annual mean | ns | 1 | 0.024 | 0.023 | 0.018 | 0.022 | 0.019 | 0.016 | 0.016 | 0.017 | 0.017 | 0.019 |
| Ozone | 2nd highest daily max | ns | 2 | 0.086 | 0.078 | 0.082 | 0.089 | 0.088 | 0.089 | 0.091 | 0.088 | 0.085 | 0.087 |
| | 4th highest daily max 8-h average | up | 2 | 0.065 | 0.063 | 0.061 | 0.071 | 0.071 | 0.07 | 0.071 | 0.07 | 0.07 | 0.075 |
| PM ₁₀ * | 90th percentile | down | 2 | 43 | 36 | 36.5 | 30.5 | 30.5 | 28.5 | 28.5 | 29.5 | 27.5 | 39.5 |
| | Weighted annual mean | down | 2 | 26.85 | 22.6 | 22.4 | 20.5 | 19.7 | 19.2 | 19.3 | 18.65 | 18.7 | 24.55 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 22.1 | 17.5 | 19.7 |
| | Weighted annual mean | NA | 1 | ND | 6.54 | 6.39 | 6.31 |
| ALEXANDRIA, LA | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 30.7 | 30.1 | 29.4 |
| | Weighted annual mean | NA | 1 | ND | 14.29 | 13.35 | 12.15 |
| ALLENTOWN-BETHLEHEM-EASTON, PA | | | | | | | | | | | | | |
| Lead | Maximum quarterly value | ns | 1 | 0.181 | 0.131 | 0.074 | 0.083 | 0.093 | 0.12 | 0.071 | 0.111 | 0.071 | 0.088 |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.5 | 4.7 | 4.8 | 3.2 | 2.7 | 2.9 | 3.2 | 2.6 | 3.3 | 2.3 |
| SO ₂ | 2nd daily max | down | 1 | 0.034 | 0.053 | 0.028 | 0.035 | 0.03 | 0.03 | 0.03 | 0.027 | 0.028 | 0.028 |
| | Annual mean | ns | 1 | 0.007 | 0.008 | 0.006 | 0.006 | 0.008 | 0.008 | 0.006 | 0.007 | 0.007 | 0.008 |
| NO ₂ | Annual mean | down | 1 | 0.02 | 0.021 | 0.018 | 0.018 | 0.016 | 0.016 | 0.015 | 0.013 | 0.017 | 0.014 |
| Ozone | 2nd highest daily max | up | 1 | 0.104 | 0.105 | 0.109 | 0.114 | 0.116 | 0.106 | 0.125 | 0.112 | 0.126 | 0.114 |
| | 4th highest daily max 8-h average | ns | 1 | 0.082 | 0.084 | 0.091 | 0.094 | 0.101 | 0.095 | 0.105 | 0.091 | 0.094 | 0.094 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | 31.4 | 37.75 | 42.85 |
| | Weighted annual mean | NA | 2 | ND | 12.37 | 13.975 | 15.215 |
| ALTOONA, PA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 2 | 2.4 | 1.7 | 1.9 | 1.5 | 1.2 | 1.6 | 1 | 1.1 | 0.7 |
| SO ₂ | 2nd daily max | ns | 1 | 0.052 | 0.058 | 0.037 | 0.033 | 0.046 | 0.032 | 0.03 | 0.045 | 0.042 | 0.032 |
| | Annual mean | ns | 1 | 0.009 | 0.01 | 0.008 | 0.008 | 0.01 | 0.008 | 0.007 | 0.006 | 0.009 | 0.007 |
| NO ₂ | Annual mean | ns | 1 | 0.015 | 0.015 | 0.013 | 0.013 | 0.014 | 0.013 | 0.013 | 0.014 | 0.014 | 0.013 |
| Ozone | 2nd highest daily max | ns | 1 | 0.1 | 0.106 | 0.112 | 0.101 | 0.114 | 0.114 | 0.111 | 0.104 | 0.107 | 0.102 |
| | 4th highest daily max 8-h average | ns | 1 | 0.086 | 0.092 | 0.091 | 0.083 | 0.096 | 0.098 | 0.091 | 0.08 | 0.083 | 0.089 |
| ANCHORAGE, AK | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 20.2 | 16.3 | 18.2 |
| | Weighted annual mean | NA | 1 | ND | 6.05 | 6.17 | 6.92 |
| ANN ARBOR, MI | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.09 | 0.094 | 0.11 | 0.104 | 0.089 | 0.097 | 0.09 | 0.094 | 0.103 | 0.1 |
| | 4th highest daily max 8-h average | ns | 1 | 0.074 | 0.084 | 0.089 | 0.085 | 0.076 | 0.086 | 0.083 | 0.082 | 0.086 | 0.089 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | 31.7 | 39.1 | 31.1 |
| | Weighted annual mean | NA | 2 | ND | 13.73 | 13.995 | 14.215 |
| ASHEVILLE, NC | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | up | 1 | 0.079 | 0.084 | 0.085 | 0.084 | 0.09 | 0.114 | 0.099 | 0.107 | 0.091 | 0.106 |
| | 4th highest daily max 8-h average | up | 1 | 0.066 | 0.069 | 0.076 | 0.074 | 0.075 | 0.09 | 0.084 | 0.09 | 0.076 | 0.09 |
| PM ₁₀ * | 90th percentile | ns | 1 | 43 | 30 | 28 | 29 | 38 | 36 | 36 | 33 | 26 | 28 |
| | Weighted annual mean | down | 1 | 22.3 | 19 | 18.4 | 18.8 | 20.7 | 20.1 | 20.5 | 18.3 | 17.5 | 7.6 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 31.6 | 30.5 | 29.4 |
| | Weighted annual mean | NA | 1 | ND | 15.61 | 14.195 | 13.77 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|-------------------------------|-------------------------------------|--------------|------|--------|--------|--------|-------|--------|--------|--------|--------|--------|
| ATHENS, GA | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | 48.2 | 39.7 | 50.9 | 27.8 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | 19.84 | 18.48 | 17.53 | 14.96 |
| ATLANTA, GA | | | | | | | | | | | | |
| Lead | Maximum quarterly value | ns | 1 | 0.02 | 0.02 | 0.027 | 0.02 | 0.017 | 0.013 | 0.053 | 0.04 | 0.05 |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.9 | 5.3 | 4.5 | 3.7 | 4.3 | 4.1 | 4.1 | 3.2 | 4.1 |
| SO ₂ | 2nd daily max | down | 2 | 0.026 | 0.026 | 0.019 | 0.021 | 0.023 | 0.018 | 0.019 | 0.019 | 0.015 |
| | Annual mean | down | 2 | 0.006 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 |
| NO ₂ | Annual mean | ns | 1 | 0.025 | 0.023 | 0.019 | 0.027 | 0.025 | 0.024 | 0.024 | 0.023 | 0.019 |
| Ozone | 2nd highest daily max | ns | 1 | 0.158 | 0.125 | 0.145 | 0.137 | 0.133 | 0.157 | 0.156 | 0.158 | 0.114 |
| | 4th highest daily max 8-h average | ns | 1 | 0.122 | 0.089 | 0.118 | 0.11 | 0.104 | 0.126 | 0.124 | 0.113 | 0.084 |
| PM ₁₀ * | 90th percentile | ns | 1 | 57 | 53 | 56 | 48 | 61 | 53 | 56 | 52 | 45 |
| | Weighted annual mean | ns | 1 | 35.1 | 32.2 | 33.3 | 31.2 | 32.2 | 31.1 | 34.9 | 36 | 37.6 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | 46.05 | 51 | 37.867 | 33.167 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | 22.035 | 19.987 | 17.79 | 15.93 |
| ATLANTIC-CAPE MAY, NJ | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.014 | 0.019 | 0.011 | 0.014 | 0.011 | 0.01 | 0.009 | 0.013 | 0.01 |
| | Annual mean | down | 1 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| Ozone | 2nd highest daily max | ns | 1 | 0.115 | 0.099 | 0.116 | 0.108 | 0.131 | 0.118 | 0.118 | 0.108 | 0.105 |
| | 4th highest daily max 8-h average | ns | 1 | 0.093 | 0.083 | 0.1 | 0.095 | 0.106 | 0.091 | 0.095 | 0.085 | 0.093 |
| AUGUSTA-AIKEN, GA-SC | | | | | | | | | | | | |
| Lead | Maximum quarterly value | down | 1 | 0.012 | 0.011 | 0.006 | 0.004 | 0.009 | 0.02 | 0.003 | 0.006 | 0.004 |
| NO ₂ | Annual mean | ns | 1 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 |
| Ozone | 2nd highest daily max | ns | 3 | 0.1 | 0.093 | 0.1 | 0.098 | 0.104 | 0.116 | 0.106 | 0.106 | 0.096 |
| | 4th highest daily max 8-h average | ns | 3 | 0.084 | 0.08 | 0.079 | 0.083 | 0.083 | 0.096 | 0.087 | 0.087 | 0.092 |
| PM ₁₀ * | 90th percentile | ns | 1 | 35 | 35 | 29 | 29 | 31 | 38 | 35 | 30 | 27 |
| | Weighted annual mean | ns | 1 | 22.1 | 21.3 | 18.7 | 18.7 | 21.4 | 22.4 | 21.1 | 20.5 | 16.7 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 42.3 | 34.9 | 28.45 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 19.89 | 16.005 | 13.78 |
| AUSTIN-SAN MARCOS, TX | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.091 | 0.102 | 0.105 | 0.098 | 0.089 | 0.115 | 0.102 | 0.107 | 0.091 |
| | 4th highest daily max 8-h average | ns | 1 | 0.08 | 0.085 | 0.089 | 0.08 | 0.075 | 0.088 | 0.087 | 0.088 | 0.078 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 24.5 | 20.85 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 10.925 | 9.625 |
| BAKERSFIELD, CA | | | | | | | | | | | | |
| Lead | Maximum quarterly value | down | 1 | 0.013 | 0.013 | 0.013 | 0.012 | 0.011 | 0.015 | 0.01 | 0.011 | 0.008 |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 3.6 | 3.6 | 3.6 | 3.6 | 2.7 | 2.8 | 5 | 5.2 | 3.2 |
| NO ₂ | Annual mean | down | 2 | 0.02 | 0.02 | 0.018 | 0.019 | 0.016 | 0.016 | 0.018 | 0.016 | 0.012 |
| Ozone | 2nd highest daily max | ns | 2 | 0.136 | 0.133 | 0.133 | 0.144 | 0.122 | 0.132 | 0.122 | 0.128 | 0.124 |
| | 4th highest daily max 8-h average | ns | 2 | 0.103 | 0.104 | 0.106 | 0.117 | 0.098 | 0.11 | 0.103 | 0.105 | 0.102 |
| PM ₁₀ * | 90th percentile | ns | 1 | 103 | 103 | 103 | 87 | 69 | 103 | 109 | 87 | 111 |
| | Weighted annual mean | ns | 1 | 58.2 | 58.2 | 58.2 | 53.6 | 46.5 | 47 | 59.3 | 53.6 | 59.8 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 95.3 | 93.9 | 95.9 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 26.36 | 22.63 | 21.83 |
| BALTIMORE, MD | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.9 | 5.7 | 4.2 | 3.9 | 4.8 | 3.3 | 4.6 | 3.4 | 3.3 |
| SO ₂ | 2nd daily max | ns | 1 | 0.024 | 0.029 | 0.022 | 0.028 | 0.025 | 0.021 | 0.02 | 0.024 | 0.026 |
| | Annual mean | down | 1 | 0.007 | 0.008 | 0.006 | 0.008 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 |
| NO ₂ | Annual mean | down | 1 | 0.033 | 0.032 | 0.026 | 0.027 | 0.026 | 0.026 | 0.024 | 0.024 | 0.023 |
| Ozone | 2nd highest daily max | ns | 3 | 0.135 | 0.121 | 0.135 | 0.112 | 0.134 | 0.12 | 0.135 | 0.111 | 0.122 |
| | 4th highest daily max 8-h average | ns | 3 | 0.106 | 0.09 | 0.104 | 0.086 | 0.1 | 0.098 | 0.107 | 0.089 | 0.094 |
| PM ₁₀ * | 90th percentile | down | 4 | 49.5 | 48 | 46 | 40.75 | 43.75 | 45 | 39.5 | 44 | 41.75 |
| | Weighted annual mean | down | 4 | 29.375 | 29.225 | 27.475 | 25.9 | 27.058 | 26.542 | 24.975 | 26.225 | 24.95 |
| PM _{2.5} * | 98th percentile | NA | 5 | ND | ND | ND | ND | ND | ND | ND | 37.24 | 40.3 |
| | Weighted annual mean | NA | 5 | ND | ND | ND | ND | ND | ND | ND | 16.58 | 16.052 |
| BANGOR, ME | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 34 | 35 | 32 | 27 | 33 | 34 | 24 | 31 | 32 |
| | Weighted annual mean | down | 1 | 22.2 | 21.9 | 20 | 18.8 | 21.1 | 17.5 | 16.7 | 17.3 | 17.1 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 25.7 | 22.8 | 31.1 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 8.98 | 9.08 | 10.09 |
| | | | | | | | | | | | | 10.44 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|---|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| BLOOMINGTON-NORMAL, IL | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 32.5 | 32.4 | 25.7 | |
| Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 14.86 | 14.79 | 12.85 | |
| BOISE CITY, ID | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 6.4 | 5.4 | 6.4 | 5 | 6.2 | 3.9 | 4.6 | 3.1 | 3.2 | 3.1 |
| PM ₁₀ * | 90th percentile | ns | 1 | 62 | 57 | 47 | 40 | 40 | 30 | 47 | 41 | 34 | 49 |
| Weighted annual mean | | down | 1 | 32.9 | 31.5 | 24.8 | 23.7 | 24.1 | 17.7 | 23.7 | 23 | 22.9 | 25.7 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 31.35 | 36.3 | 44.7 | 32.65 |
| Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 9.045 | 9.24 | 10.37 | 9.69 |
| BOSTON, MA-NH | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 2 | 3.6 | 4.3 | 3.55 | 3.25 | 3.3 | 2.9 | 3.9 | 2.35 | 2.45 | 1.6 |
| SO ₂ | 2nd daily max | down | 3 | 0.035 | 0.035 | 0.025 | 0.023 | 0.032 | 0.028 | 0.024 | 0.025 | 0.019 | 0.018 |
| Annual mean | | down | 3 | 0.01 | 0.009 | 0.007 | 0.007 | 0.008 | 0.008 | 0.007 | 0.005 | 0.005 | 0.005 |
| NO ₂ | Annual mean | | 4 | 0.026 | 0.027 | 0.024 | 0.024 | 0.024 | 0.024 | 0.023 | 0.02 | 0.021 | 0.02 |
| Ozone | 2nd highest daily max | ns | 1 | 0.102 | 0.121 | 0.119 | 0.105 | 0.105 | 0.113 | 0.115 | 0.085 | 0.122 | 0.145 |
| | 4th highest daily max 8-h average | ns | 1 | 0.078 | 0.09 | 0.094 | 0.083 | 0.091 | 0.1 | 0.088 | 0.07 | 0.1 | 0.1 |
| PM ₁₀ * | 90th percentile | ns | 1 | 44 | 45 | 41 | 33 | 37 | 42 | 43 | 36 | 40 | 41 |
| Weighted annual mean | ns | 1 | 30.2 | 28.2 | 26.2 | 24.4 | 24.7 | 26.4 | 29.6 | 24.5 | 26.8 | 24.6 | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 33 | 27.2 | 31.5 | 29.3 |
| Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 11.31 | 11.35 | 12.13 | 10.06 |
| BOULDER-LONGMONT, CO | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 6.4 | 6.2 | 4.7 | 5.5 | 5.4 | 4.7 | 3.7 | 3.1 | 3.5 | 3.2 |
| Ozone | 2nd highest daily max | ns | 1 | 0.092 | 0.092 | 0.09 | 0.087 | 0.092 | 0.111 | 0.099 | 0.09 | 0.088 | 0.094 |
| | 4th highest daily max 8-h average | ns | 1 | 0.072 | 0.072 | 0.074 | 0.075 | 0.072 | 0.089 | 0.075 | 0.072 | 0.071 | 0.078 |
| PM ₁₀ * | 90th percentile | ns | 1 | 35 | 35 | 35 | 30 | 31 | 36 | 35 | 32 | 36 | 37 |
| Weighted annual mean | up | 1 | 19.5 | 19.5 | 19.5 | 19.6 | 20.9 | 24.1 | 22.5 | 22.4 | 24.2 | 23.4 | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 21.4 | 20.1 | 22.85 | 22.95 |
| Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 7.53 | 8.82 | 9.145 | 8.635 |
| BRAZORIA, TX | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.132 | 0.112 | 0.148 | 0.11 | 0.137 | 0.111 | 0.161 | 0.136 | 0.113 | 0.136 |
| | 4th highest daily max 8-h average | ns | 1 | 0.092 | 0.085 | 0.113 | 0.079 | 0.085 | 0.09 | 0.112 | 0.079 | 0.084 | 0.095 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 25.3 | 24.9 | 22.7 |
| Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | ND | 10.48 | 10.21 | 9.47 |
| BRIDGEPORT, CT | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.7 | 5.8 | 4.9 | 3 | 4 | 2.8 | 3.2 | 2.4 | 2.7 | 2.5 |
| SO ₂ | 2nd daily max | ns | 1 | 0.035 | 0.049 | 0.028 | 0.023 | 0.031 | 0.024 | 0.023 | 0.024 | 0.029 | 0.029 |
| Annual mean | | down | 1 | 0.01 | 0.01 | 0.007 | 0.006 | 0.007 | 0.007 | 0.006 | 0.006 | 0.007 | 0.005 |
| Ozone | 2nd highest daily max | ns | 1 | 0.165 | 0.174 | 0.14 | 0.123 | 0.135 | 0.134 | 0.14 | 0.122 | 0.144 | 0.145 |
| | 4th highest daily max 8-h average | ns | 1 | 0.111 | 0.093 | 0.115 | 0.096 | 0.103 | 0.097 | 0.096 | 0.09 | 0.102 | 0.103 |
| PM ₁₀ * | 90th percentile | ns | 1 | 43 | 46 | 37 | 32 | 34 | 33 | 30 | 37 | 36 | 34 |
| Weighted annual mean | down | 1 | 20.8 | 25.7 | 21.8 | 20.6 | 21.4 | 20.8 | 19.4 | 20.4 | 19.3 | 17.4 | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.1 | 41.5 | 40.1 | 32.9 |
| Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 13.06 | 13.89 | 13.73 | 12.7 |
| BROCKTON, MA | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 26 | 28.95 | 31.9 | 35.9 |
| Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 11.08 | 11.63 | 12.18 | 11.64 |
| BROWNSVILLE-HARLINGEN-SAN BENITO, TX M | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.8 | 3.8 | 2.6 | 2.2 | 3.2 | 3.2 | 2.6 | 1.6 | 1.5 | 1.9 |
| Ozone | 2nd highest daily max | ns | 1 | 0.034 | 0.085 | 0.084 | 0.077 | 0.08 | 0.081 | 0.075 | 0.08 | 0.074 | 0.077 |
| | 4th highest daily max 8-h average | down | 1 | 0.072 | 0.072 | 0.069 | 0.065 | 0.065 | 0.069 | 0.066 | 0.064 | 0.063 | 0.065 |
| PM ₁₀ * | 90th percentile | ns | 1 | 45 | 36 | 35 | 28 | 36 | 45 | 32 | 47 | 31 | 33 |
| Weighted annual mean | ns | 1 | 22.4 | 22.5 | 21.4 | 18.9 | 20.6 | 24.6 | 21.5 | 25.4 | 19.3 | 20 | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 18.3 | 18 | 22.7 |
| Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 9.59 | 9.75 | 9.79 | |
| BUFFALO-NIAGARA FALLS, NY | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.4 | 4.2 | 3.1 | 3.7 | 3.3 | 3.1 | 2.2 | 2 | 1.9 | 1.8 |
| SO ₂ | 2nd daily max | ns | 2 | 0.04 | 0.043 | 0.039 | 0.033 | 0.057 | 0.034 | 0.037 | 0.038 | 0.037 | 0.046 |
| Annual mean | | ns | 2 | 0.01 | 0.011 | 0.008 | 0.008 | 0.009 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 |
| NO ₂ | Annual mean | ns | 2 | 0.017 | 0.019 | 0.019 | 0.019 | 0.018 | 0.018 | 0.019 | 0.018 | 0.018 | 0.017 |
| Ozone | 2nd highest daily max | up | 1 | 0.088 | 0.088 | 0.099 | 0.091 | 0.088 | 0.111 | 0.102 | 0.105 | 0.116 | 0.116 |
| | 4th highest daily max 8-h average | up | 1 | 0.072 | 0.079 | 0.082 | 0.074 | 0.073 | 0.094 | 0.09 | 0.085 | 0.102 | 0.105 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | 30.033 | 39.767 | 38.333 |
| Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | ND | 13.45 | 13.29 | 12.363 | |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|--|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| BURLINGTON, VT | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 22.7 | 29.9 | 38 | |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 8.32 | 9.74 | 9.89 | |
| CANTON-MASSILLON, OH | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 3.2 | 5.2 | 3 | 2.5 | 2.5 | 3.5 | 2.3 | 2.6 | 2.8 | |
| SO ₂ | 2nd daily max | down | 1 | 0.046 | 0.052 | 0.033 | 0.032 | 0.025 | 0.029 | 0.028 | 0.028 | 0.025 | |
| | Annual mean | ns | 1 | 0.01 | 0.009 | 0.006 | 0.006 | 0.007 | 0.007 | 0.007 | 0.008 | 0.007 | |
| Ozone | 2nd highest daily max | ns | 2 | 0.104 | 0.098 | 0.111 | 0.096 | 0.096 | 0.114 | 0.105 | 0.099 | 0.105 | |
| | 4th highest daily max 8-h average | ns | 2 | 0.09 | 0.084 | 0.093 | 0.085 | 0.083 | 0.096 | 0.09 | 0.084 | 0.089 | |
| PM ₁₀ * | 90th percentile | ns | 3 | 41 | 47.667 | 48.667 | 35.667 | 41.333 | 43.333 | 35.333 | 37.667 | 33 | |
| | Weighted annual mean | down | 3 | 24.633 | 27.233 | 27.567 | 23.967 | 24.067 | 24.433 | 23.133 | 23 | 21.733 | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 41.7 | 38.8 | 44.6 | |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 17.735 | 17.785 | 17.225 | |
| CASPER, WY | | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 27 | 34 | 32 | 33 | 29 | 31 | 29 | 30 | 30 | |
| | Weighted annual mean | ns | 1 | 17.7 | 17.3 | 19.4 | 19.1 | 15.7 | 17.2 | 19.7 | 17 | 18.7 | |
| CEDAR RAPIDS, IA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.2 | 4.2 | 2.6 | 7.8 | 2.4 | 2.5 | 2 | 1.8 | 1.9 | |
| SO ₂ | 2nd daily max | ns | 2 | 0.017 | 0.016 | 0.013 | 0.011 | 0.012 | 0.01 | 0.016 | 0.008 | 0.015 | |
| | Annual mean | ns | 2 | 0.003 | 0.003 | 0.003 | 0.002 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 | |
| PM ₁₀ * | 90th percentile | up | 1 | 32 | 33 | 34 | 33 | 41 | 42 | 34 | 47 | 39 | |
| | Weighted annual mean | up | 1 | 20.7 | 21.5 | 21.4 | 20.9 | 25.7 | 26.4 | 23.3 | 31.6 | 26.7 | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 32.15 | 27.95 | 33.9 | |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 11.7 | 10.78 | 11.635 | |
| CHAMPAIGN-URBANA, IL | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.015 | 0.024 | 0.011 | 0.013 | 0.018 | 0.019 | 0.01 | 0.016 | 0.016 | |
| | Annual mean | down | 1 | 0.004 | 0.004 | 0.003 | 0.003 | 0.004 | 0.003 | 0.002 | 0.002 | 0.002 | |
| Ozone | 2nd highest daily max | ns | 1 | 0.074 | 0.094 | 0.095 | 0.094 | 0.088 | 0.105 | 0.108 | 0.084 | 0.08 | |
| | 4th highest daily max 8-h average | ns | 1 | 0.066 | 0.083 | 0.084 | 0.085 | 0.076 | 0.083 | 0.094 | 0.073 | 0.082 | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 27.8 | 29.3 | |
| | Weighted annual mean | NA | 1 | ND | 14.82 | 12.59 | |
| CHARLESTON-NORTH CHARLESTON, SC | | | | | | | | | | | | | |
| Lead | Maximum quarterly value | ns | 2 | 0.012 | 0.015 | 0.01 | 0.016 | 0.011 | 0.021 | 0.01 | 0.02 | 0.008 | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.8 | 4 | 6.4 | 4.7 | 3.9 | 2.9 | 4 | 2.7 | 3 | |
| SO ₂ | 2nd daily max | down | 1 | 0.025 | 0.038 | 0.02 | 0.021 | 0.022 | 0.013 | 0.011 | 0.013 | 0.011 | |
| | Annual mean | down | 1 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.003 | 0.003 | |
| NO ₂ | Annual mean | ns | 1 | 0.012 | 0.011 | 0.011 | 0.01 | 0.011 | 0.01 | 0.01 | 0.011 | 0.01 | |
| Ozone | 2nd highest daily max | ns | 1 | 0.109 | 0.097 | 0.087 | 0.099 | 0.09 | 0.106 | 0.099 | 0.093 | 0.085 | |
| | 4th highest daily max 8-h average | ns | 1 | 0.076 | 0.074 | 0.066 | 0.076 | 0.072 | 0.083 | 0.081 | 0.08 | 0.071 | |
| PM ₁₀ * | 90th percentile | ns | 2 | 40.5 | 38.5 | 30.5 | 32.5 | 31 | 40 | 31.5 | 35.5 | 32 | |
| | Weighted annual mean | down | 2 | 25.65 | 24.9 | 20.7 | 21.65 | 21 | 22.8 | 20.8 | 22.6 | 20.45 | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 30.3 | 25.8 | |
| | Weighted annual mean | NA | 1 | ND | 13.44 | 11.97 | |
| CHARLESTON, WV | | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 52 | 49 | 40 | 41 | 32 | 35 | 37 | 44 | 41 | |
| | Weighted annual mean | ns | 1 | 29.2 | 28.1 | 26 | 24 | 21.1 | 21.4 | 21.9 | 26.5 | 24.8 | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 38.7 | 37 | 44.5 | |
| | Weighted annual mean | NA | 1 | ND | 17.89 | 18.2 | |
| CHARLOTTE-GASTONIA-ROCK HILL, NC-SC M | | | | | | | | | | | | | |
| Maximum quarterly value | | ns | 1 | 0.016 | 0.032 | 0.013 | 0.01 | 0.007 | 0.021 | 0.018 | 0.042 | 0.008 | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.8 | 5.8 | 4.7 | 4.4 | 6 | 5 | 4.3 | 4.7 | 4.3 | |
| Ozone | 2nd highest daily max | ns | 2 | 0.126 | 0.114 | 0.114 | 0.127 | 0.115 | 0.13 | 0.126 | 0.123 | 0.118 | |
| | 4th highest daily max 8-h average | ns | 2 | 0.098 | 0.089 | 0.094 | 0.099 | 0.098 | 0.107 | 0.104 | 0.094 | 0.093 | |
| PM ₁₀ * | 90th percentile | ns | 3 | 41.333 | 43.667 | 41.667 | 44 | 43.667 | 49.667 | 43.667 | 47.333 | 38.667 | |
| | Weighted annual mean | ns | 3 | 28.467 | 29.1 | 27.767 | 30.4 | 28.433 | 29.767 | 27.8 | 29.267 | 25.9 | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 37.5 | 32.95 | 31.85 | |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 17.58 | 16.54 | 15.16 | |
| CHARLOTTESVILLE, VA | | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 40 | 33 | 41 | 35 | 36 | 33 | 32 | 43 | 30 | |
| | Weighted annual mean | down | 1 | 23.7 | 21.5 | 22.5 | 21.3 | 20.9 | 22.7 | 19.9 | 22.9 | 17.8 | 19.4 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|--|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|
| CHATTANOOGA, TN-GA | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 2 | 0.104 | 0.114 | 0.108 | 0.113 | 0.107 | 0.129 | 0.117 | 0.119 | 0.106 |
| | 4th highest daily max 8-h average | ns | 2 | 0.088 | 0.088 | 0.09 | 0.088 | 0.088 | 0.1 | 0.096 | 0.097 | 0.085 |
| PM ₁₀ * | 90th percentile | down | 1 | 49 | 50 | 51 | 49 | 43 | 43 | 42 | 45 | 42 |
| | Weighted annual mean | down | 1 | 32.1 | 33.9 | 32.1 | 32.5 | 26.4 | 27 | 26.9 | 28.9 | 26.9 |
| CHEYENNE, WY | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 24 | 28 | 26 | 25 | 20 | 22 | 23 | 24 | 26 |
| | Weighted annual mean | ns | 1 | 15.5 | 17.8 | 14.6 | 15.1 | 12.9 | 13.9 | 14.9 | 15.7 | 15.7 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 12.4 | 13.2 | 12.2 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 5.57 | 5.58 | 5.03 |
| CHICAGO, IL | | | | | | | | | | | | |
| CO | Maximum quarterly value | down | 2 | 0.076 | 0.077 | 0.061 | 0.059 | 0.059 | 0.063 | 0.042 | 0.085 | 0.038 |
| | 2nd max (daily-non-overlapping 8-h) | down | 2 | 5.45 | 5.8 | 4.1 | 4.05 | 4.15 | 4.6 | 3.9 | 3.2 | 2.9 |
| SO ₂ | 2nd daily max | ns | 3 | 0.044 | 0.042 | 0.032 | 0.028 | 0.033 | 0.039 | 0.036 | 0.043 | 0.023 |
| | Annual mean | ns | 3 | 0.007 | 0.007 | 0.006 | 0.006 | 0.007 | 0.007 | 0.007 | 0.007 | 0.005 |
| NO ₂ | Annual mean | ns | 1 | 0.031 | 0.032 | 0.032 | 0.031 | 0.034 | 0.032 | 0.032 | 0.032 | 0.032 |
| Ozone | 2nd highest daily max | ns | 3 | 0.085 | 0.098 | 0.114 | 0.102 | 0.105 | 0.096 | 0.104 | 0.083 | 0.093 |
| | 4th highest daily max 8-h average | ns | 3 | 0.068 | 0.076 | 0.085 | 0.077 | 0.082 | 0.078 | 0.089 | 0.067 | 0.073 |
| PM ₁₀ * | 90th percentile | ns | 1 | 67 | 67 | 67 | 61 | 59 | 59 | 66 | 68 | 72 |
| | Weighted annual mean | ns | 1 | 37.4 | 37.4 | 37.4 | 35.8 | 33.9 | 35.2 | 36.1 | 35.1 | 38 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 54.1 | 40.65 | 45.95 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 21.85 | 19.265 | 20.12 |
| CHICO-PARADISE, CA | | | | | | | | | | | | |
| CO | Maximum quarterly value | ns | 1 | 0.01 | 0.008 | 0.005 | 0.005 | 0.006 | 0.006 | 0.004 | 0.005 | 0.005 |
| | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 3.9 | 4.1 | 3.5 | 3.4 | 3.5 | 3.8 | 4 | 3.5 | 3.8 |
| NO ₂ | Annual mean | down | 1 | 0.016 | 0.015 | 0.014 | 0.013 | 0.013 | 0.013 | 0.015 | 0.012 | 0.012 |
| Ozone | 2nd highest daily max | ns | 1 | 0.09 | 0.097 | 0.091 | 0.096 | 0.074 | 0.103 | 0.11 | 0.091 | 0.094 |
| | 4th highest daily max 8-h average | ns | 1 | 0.076 | 0.082 | 0.076 | 0.074 | 0.066 | 0.078 | 0.087 | 0.078 | 0.081 |
| PM ₁₀ * | 90th percentile | ns | 1 | 60 | 55 | 52 | 40 | 40 | 37 | 50 | 56 | 47 |
| | Weighted annual mean | ns | 1 | 27.2 | 33.3 | 26.3 | 25 | 25.9 | 22.3 | 28.6 | 27.4 | 29.2 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 70 | 56 |
| | Weighted annual mean | NA | 1 | ND | 16.26 | 13.01 |
| CINCINNATI, OH-KY-IN | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.8 | 4.1 | 3.1 | 2.7 | 2.4 | 2.5 | 2.5 | 2.4 | 2.2 |
| SO ₂ | 2nd daily max | ns | 1 | 0.037 | 0.051 | 0.025 | 0.045 | 0.045 | 0.036 | 0.03 | 0.053 | 0.042 |
| | Annual mean | ns | 1 | 0.011 | 0.009 | 0.007 | 0.011 | 0.01 | 0.01 | 0.008 | 0.009 | 0.011 |
| Ozone | 2nd highest daily max | ns | 1 | 0.104 | 0.118 | 0.114 | 0.112 | 0.11 | 0.121 | 0.105 | 0.11 | 0.106 |
| | 4th highest daily max 8-h average | ns | 1 | 0.08 | 0.099 | 0.098 | 0.088 | 0.084 | 0.091 | 0.091 | 0.087 | 0.082 |
| PM ₁₀ * | 90th percentile | down | 2 | 54.5 | 47.5 | 53 | 41 | 44 | 43.75 | 42 | 43 | 40.5 |
| | Weighted annual mean | down | 2 | 28.75 | 28.25 | 29.9 | 25.6 | 25.65 | 25.675 | 24.7 | 25 | 23.3 |
| PM _{2.5} * | 98th percentile | NA | 4 | ND | ND | ND | ND | ND | ND | 35.433 | 37.2 | 40.3 |
| | Weighted annual mean | NA | 4 | ND | ND | ND | ND | ND | ND | 17 | 16.83 | 15.695 |
| CLARKSVILLE-HOPKINSVILLE, TN-KY | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.058 | 0.037 | 0.019 | 0.023 | 0.026 | 0.02 | 0.016 | 0.018 | 0.017 |
| | Annual mean | ns | 1 | 0.01 | 0.007 | 0.006 | 0.006 | 0.005 | 0.006 | 0.005 | 0.006 | 0.007 |
| Ozone | 2nd highest daily max | ns | 1 | 0.103 | 0.103 | 0.102 | 0.1 | 0.099 | 0.111 | 0.115 | 0.099 | 0.096 |
| | 4th highest daily max 8-h average | ns | 1 | 0.082 | 0.092 | 0.086 | 0.079 | 0.082 | 0.086 | 0.092 | 0.081 | 0.082 |
| PM ₁₀ * | 90th percentile | down | 1 | 40 | 40 | 40 | 41 | 35 | 39 | 36 | 40 | 31 |
| | Weighted annual mean | down | 1 | 25.8 | 25.8 | 25.8 | 24.9 | 21.4 | 23.1 | 22.9 | 23.3 | 20.4 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 30.1 | 38.3 | 27.2 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 15.12 | 15.45 | 13.51 |
| CLEVELAND-LORAIN-ELYRIA, OH | | | | | | | | | | | | |
| CO | Maximum quarterly value | down | 1 | 0.11 | 0.06 | 0.053 | 0.037 | 0.05 | 0.043 | 0.03 | 0.023 | 0.03 |
| SO ₂ | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.6 | 7.7 | 8.2 | 4.9 | 4.5 | 3.9 | 3.9 | 3.2 | 2.2 |
| | 2nd daily max | down | 2 | 0.053 | 0.047 | 0.039 | 0.037 | 0.044 | 0.046 | 0.044 | 0.031 | 0.029 |
| NO ₂ | Annual mean | down | 2 | 0.014 | 0.012 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.008 | 0.008 |
| Ozone | 2nd highest daily max | ns | 1 | 0.028 | 0.028 | 0.027 | 0.026 | 0.028 | 0.027 | 0.025 | 0.023 | 0.024 |
| | 4th highest daily max 8-h average | ns | 1 | 0.107 | 0.093 | 0.108 | 0.103 | 0.096 | 0.12 | 0.118 | 0.101 | 0.108 |
| PM ₁₀ * | 90th percentile | down | 3 | 81 | 76.667 | 78 | 65 | 67.667 | 66.667 | 67.333 | 69 | 65 55.333 |
| | Weighted annual mean | down | 3 | 38.867 | 46.933 | 45.667 | 40.433 | 40.1 | 42.5 | 41.4 | 40.4 | 38.7 33.033 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 43.967 | 44.267 | 44.4 41.467 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 19.16 | 19.573 | 18.33 17.287 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|-------------------------------|-------------------------------------|--------------|------|--------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| COLORADO SPRINGS, CO | | | | | | | | | | | | | |
| CO | Maximum quarterly value | ns | 1 | 0.013 | 0.014 | 0.01 | 0.004 | 0.004 | 0.012 | 0.009 | 0.011 | 0.009 | 0.006 |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.7 | 4.9 | 5.5 | 5 | 4.9 | 3.8 | 4.2 | 3 | 2.8 | 5.2 |
| SO ₂ | 2nd daily max | down | 1 | 0.011 | 0.01 | 0.01 | 0.008 | 0.007 | 0.007 | 0.008 | 0.006 | 0.006 | 0.006 |
| NO ₂ | Annual mean | down | 1 | 0.003 | 0.004 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| PM ₁₀ * | Annual mean | ns | 1 | 0.008 | 0.008 | 0.008 | 0.007 | 0.008 | 0.007 | 0.007 | 0.009 | 0.008 | 0.008 |
| PM ₁₀ * | 90th percentile | ns | 3 | 40 | 36 | 35 | 31.333 | 28.333 | 30.667 | 27 | 30.333 | 32 | 34.333 |
| PM _{2.5} * | Weighted annual mean | ns | 3 | 23.067 | 21.5 | 19.7 | 19.333 | 18.7 | 18.833 | 18.233 | 18.6 | 20.2 | 21.533 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 14.6 | 15.5 | 19.6 |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 7.58 | 7.72 | 7.77 |
| COLUMBIA, SC | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 2 | 0.013 | 0.013 | 0.011 | 0.015 | 0.015 | 0.016 | 0.013 | 0.012 | 0.014 | 0.014 |
| NO ₂ | Annual mean | ns | 2 | 0.003 | 0.002 | 0.002 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| Ozone | Annual mean | ns | 1 | 0.013 | 0.011 | 0.013 | 0.013 | 0.011 | 0.014 | 0.014 | 0.014 | 0.014 | 0.012 |
| Ozone | 2nd highest daily max | ns | 1 | 0.112 | 0.103 | 0.104 | 0.088 | 0.108 | 0.116 | 0.117 | 0.113 | 0.104 | 0.101 |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.089 | 0.082 | 0.079 | 0.074 | 0.086 | 0.098 | 0.094 | 0.096 | 0.082 | 0.084 |
| PM ₁₀ * | 90th percentile | ns | 2 | 73.5 | 71 | 72 | 69 | 75.5 | 89.5 | 83.5 | 70.5 | 65.5 | 60.5 |
| PM ₁₀ * | Weighted annual mean | ns | 2 | 41 | 40.65 | 40.6 | 38.75 | 42.75 | 48.6 | 47.55 | 40.6 | 39.75 | 34.6 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 36.6 | 29.5 | 25 | 28.1 |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 15.9 | 15.795 | 13.58 | 12.99 |
| COLUMBUS, GA-AL | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.097 | 0.097 | 0.113 | 0.095 | 0.094 | 0.108 | 0.107 | 0.105 | 0.088 | 0.095 |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.075 | 0.075 | 0.089 | 0.08 | 0.08 | 0.091 | 0.089 | 0.087 | 0.073 | 0.079 |
| PM ₁₀ * | 90th percentile | ns | 1 | 37 | 44 | 46 | 33 | 39 | 45 | 40 | 44 | 39 | 33 |
| PM ₁₀ * | Weighted annual mean | ns | 1 | 25.4 | 26.5 | 28.2 | 22.2 | 26.4 | 30.1 | 26.5 | 25.6 | 22.4 | 22.6 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 44.1 | 46.5 | 40.1 | 33.1 |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 19.885 | 18.975 | 15.695 | 14.45 |
| COLUMBUS, OH | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.3 | 4.1 | 4.9 | 2.7 | 2.9 | 3.7 | 2.5 | 2.8 | 2.6 | 2.5 |
| SO ₂ | 2nd daily max | ns | 1 | 0.032 | 0.04 | 0.016 | 0.015 | 0.021 | 0.018 | 0.015 | 0.019 | 0.017 | 0.017 |
| NO ₂ | Annual mean | ns | 1 | 0.007 | 0.006 | 0.003 | 0.004 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 |
| Ozone | 2nd highest daily max | ns | 1 | 0.101 | 0.102 | 0.106 | 0.106 | 0.095 | 0.113 | 0.111 | 0.105 | 0.097 | 0.112 |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.083 | 0.088 | 0.088 | 0.087 | 0.083 | 0.094 | 0.095 | 0.079 | 0.08 | 0.095 |
| PM ₁₀ * | 90th percentile | ns | 1 | 50 | 46 | 53 | 39 | 63 | 70 | 62 | 54 | 52 | 44 |
| PM ₁₀ * | Weighted annual mean | ns | 1 | 27.1 | 26.7 | 30.6 | 24.8 | 30.9 | 34.2 | 32.6 | 34.1 | 30.5 | 29.2 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 38.633 | 39.167 | 40.433 | 39.567 |
| PM _{2.5} * | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 17.603 | 17.597 | 17.083 | 16.003 |
| CORPUS CHRISTI, TX | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.11 | 0.103 | 0.109 | 0.099 | 0.094 | 0.102 | 0.103 | 0.099 | 0.092 | 0.104 |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.08 | 0.079 | 0.089 | 0.083 | 0.077 | 0.082 | 0.084 | 0.083 | 0.077 | 0.084 |
| PM ₁₀ * | 90th percentile | ns | 1 | 57 | 48 | 47 | 37 | 50 | 57 | 62 | 54 | 41 | 48 |
| PM ₁₀ * | Weighted annual mean | ns | 1 | 30.6 | 31.3 | 31.1 | 25.1 | 30.5 | 34.5 | 34.9 | 35.7 | 27.2 | 32.9 |
| CORVALLIS, OR | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.6 | 30.1 | 27.5 | 27.3 |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 7.05 | 7.88 | 7.26 | 7.64 |
| DALLAS, TX | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.4 | 4.4 | 4.4 | 5.3 | 4.6 | 4.4 | 3.2 | 2.2 | 2.4 | 2.1 |
| SO ₂ | 2nd daily max | ns | 2 | 0.012 | 0.012 | 0.012 | 0.012 | 0.013 | 0.007 | 0.01 | 0.01 | 0.01 | 0.01 |
| NO ₂ | Annual mean | down | 2 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.001 |
| PM ₁₀ * | 90th percentile | ns | 2 | 42.5 | 44 | 45 | 42 | 39.5 | 45.5 | 42.5 | 41.5 | 41.5 | 45.5 |
| PM ₁₀ * | Weighted annual mean | ns | 2 | 25.1 | 25.6 | 26.65 | 25.7 | 24.8 | 27.7 | 26.7 | 27.05 | 27.2 | 26.1 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 33 | 31.3 | 37.6 |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 13.45 | 13.91 | 13.57 |
| DANBURY, CT | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.024 | 0.037 | 0.02 | 0.02 | 0.024 | 0.02 | 0.024 | 0.017 | 0.022 | 0.023 |
| SO ₂ | Annual mean | down | 1 | 0.006 | 0.006 | 0.004 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| Ozone | 2nd highest daily max | ns | 1 | 0.14 | 0.125 | 0.134 | 0.11 | 0.138 | 0.115 | 0.151 | 0.124 | 0.133 | 0.141 |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.096 | 0.093 | 0.093 | 0.081 | 0.105 | 0.092 | 0.106 | 0.09 | 0.096 | 0.109 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 32.9 | 35.2 | 30.7 |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 12.73 | 13.2 | 12.59 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|------------------------------------|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| DOVER, DE | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | down | 1 | 0.137 | 0.137 | 0.137 | 0.11 | 0.124 | 0.131 | 0.12 | 0.126 | 0.117 | 0.112 |
| | 4th highest daily max 8-h average | ns | 1 | 0.097 | 0.097 | 0.097 | 0.088 | 0.099 | 0.102 | 0.097 | 0.093 | 0.091 | 0.094 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 28.5 | 34.4 | 34.4 | 37.1 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.47 | 13.2 | 13.05 | 12.38 |
| DULUTH-SUPERIOR, MN-WI | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.1 | 4.3 | 4.5 | 4.5 | 3.2 | 3.7 | 2.9 | 2.1 | 2.5 | 2.1 |
| PM ₁₀ * | 90th percentile | ns | 2 | 36 | 33.5 | 35 | 31 | 32.5 | 31 | 37 | 44 | 34.5 | 36.5 |
| | Weighted annual mean | ns | 2 | 21.4 | 20.65 | 20.5 | 20.05 | 19.85 | 21.3 | 21.75 | 23.9 | 22.25 | 21.05 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 25.3 | 25.2 | 23.45 | 23.25 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 8.64 | 8.385 | 8.48 | 7.855 |
| DUTCHESS COUNTY, NY | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.139 | 0.117 | 0.115 | 0.109 | 0.111 | 0.108 | 0.12 | 0.105 | 0.109 | 0.152 |
| | 4th highest daily max 8-h average | ns | 1 | 0.099 | 0.087 | 0.093 | 0.089 | 0.089 | 0.089 | 0.093 | 0.079 | 0.091 | 0.111 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 30.8 | 27.6 | 31.2 |
| | Weighted annual mean | NA | 1 | ND | 11.55 | 11.17 | 10.74 |
| EL PASO, TX | | | | | | | | | | | | | |
| CO | Maximum quarterly value | down | 1 | 0.229 | 0.14 | 0.192 | 0.153 | 0.108 | 0.144 | 0.145 | 0.099 | 0.099 | 0.099 |
| | 2nd max (daily-non-overlapping 8-h) | down | 1 | 10.6 | 7.6 | 7.5 | 9.1 | 7.2 | 8.3 | 5.7 | 7.3 | 5.8 | 4.8 |
| Ozone | 2nd highest daily max | ns | 1 | 0.098 | 0.115 | 0.126 | 0.123 | 0.114 | 0.122 | 0.108 | 0.114 | 0.116 | 0.127 |
| | 4th highest daily max 8-h average | ns | 1 | 0.059 | 0.075 | 0.084 | 0.078 | 0.071 | 0.088 | 0.071 | 0.08 | 0.075 | 0.089 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 20.7 | 23 | 23.8 | 29.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 9.24 | 9.18 | 9.34 | 10.61 |
| ELKHART-GOSHEN, IN | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 38.6 | 37.5 | 35.2 |
| | Weighted annual mean | NA | 1 | ND | 15.67 | 15.7 | 14.98 |
| ELMIRA, NY | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.019 | 0.023 | 0.014 | 0.016 | 0.015 | 0.011 | 0.015 | 0.012 | 0.015 | 0.013 |
| | Annual mean | ns | 1 | 0.005 | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 |
| Ozone | 2nd highest daily max | up | 1 | 0.09 | 0.084 | 0.088 | 0.088 | 0.081 | 0.094 | 0.092 | 0.089 | 0.094 | 0.098 |
| | 4th highest daily max 8-h average | ns | 1 | 0.08 | 0.074 | 0.076 | 0.072 | 0.073 | 0.082 | 0.082 | 0.073 | 0.082 | 0.089 |
| ENID, OK | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 24.8 | 28.7 | 27.8 |
| | Weighted annual mean | NA | 1 | ND | 10.24 | 10.73 | 9.7 |
| ERIE, PA | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.072 | 0.076 | 0.05 | 0.066 | 0.035 | 0.068 | 0.043 | 0.041 | 0.043 | 0.037 |
| | Annual mean | ns | 1 | 0.011 | 0.01 | 0.009 | 0.011 | 0.009 | 0.01 | 0.01 | 0.008 | 0.01 | 0.011 |
| NO ₂ | Annual mean | down | 1 | 0.014 | 0.015 | 0.015 | 0.015 | 0.015 | 0.014 | 0.015 | 0.012 | 0.012 | 0.012 |
| Ozone | 2nd highest daily max | ns | 1 | 0.107 | 0.101 | 0.105 | 0.1 | 0.103 | 0.122 | 0.112 | 0.095 | 0.104 | 0.114 |
| | 4th highest daily max 8-h average | ns | 1 | 0.081 | 0.09 | 0.088 | 0.083 | 0.087 | 0.098 | 0.096 | 0.078 | 0.089 | 0.098 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 28.2 | 37.5 | 42.9 |
| | Weighted annual mean | NA | 1 | ND | 13.99 | 13.83 | 13.21 |
| EUGENE-SPRINGFIELD, OR | | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 5.9 | 6.4 | 5.7 | 5.7 | 5.2 | 4.6 | 5 | 4.3 | 4.1 | 4.2 |
| Ozone | 2nd highest daily max | ns | 1 | 0.072 | 0.082 | 0.077 | 0.111 | 0.073 | 0.089 | 0.068 | 0.056 | 0.077 | 0.08 |
| | 4th highest daily max 8-h average | ns | 1 | 0.054 | 0.068 | 0.06 | 0.084 | 0.056 | 0.073 | 0.056 | 0.047 | 0.061 | 0.067 |
| PM ₁₀ * | 90th percentile | down | 2 | 72 | 53 | 49 | 37 | 41.5 | 36 | 36.5 | 36.5 | 40 | 36.5 |
| | Weighted annual mean | down | 2 | 27.9 | 23.65 | 21.5 | 18.6 | 20.1 | 17 | 17.9 | 18.4 | 18.35 | 19.4 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 46.65 | 45.75 | 46.9 | 50.8 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 10.65 | 11.28 | 11.605 | 11.88 |
| EVANSVILLE-HENDERSON, IN-KY | | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 2 | 4.35 | 4.05 | 3.2 | 3.05 | 3.65 | 3.05 | 2.95 | 2.3 | 2.4 | 2.3 |
| SO ₂ | 2nd daily max | ns | 3 | 0.06 | 0.055 | 0.051 | 0.064 | 0.062 | 0.057 | 0.074 | 0.062 | 0.05 | 0.051 |
| | Annual mean | ns | 3 | 0.014 | 0.012 | 0.01 | 0.01 | 0.01 | 0.012 | 0.012 | 0.011 | 0.01 | 0.01 |
| NO ₂ | Annual mean | ns | 1 | 0.017 | 0.018 | 0.017 | 0.017 | 0.016 | 0.018 | 0.016 | 0.016 | 0.016 | 0.016 |
| Ozone | 2nd highest daily max | ns | 1 | 0.094 | 0.096 | 0.108 | 0.092 | 0.086 | 0.103 | 0.109 | 0.092 | 0.09 | 0.09 |
| | 4th highest daily max 8-h average | ns | 1 | 0.071 | 0.079 | 0.089 | 0.081 | 0.075 | 0.078 | 0.081 | 0.078 | 0.072 | 0.072 |
| PM ₁₀ * | 90th percentile | down | 3 | 50 | 51 | 51.333 | 39.333 | 43 | 44.333 | 43.333 | 41.333 | 39.667 | 38.333 |
| | Weighted annual mean | down | 3 | 29.733 | 31.333 | 29.833 | 24.833 | 25.667 | 27.367 | 25.167 | 24.5 | 24.733 | 24.267 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 37.3 | 36.4 | 46.7 |
| | Weighted annual mean | NA | 1 | ND | 16.08 | 15.57 | 15.36 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|-------|-------|--------|
| FARGO-MOORHEAD, ND-MN | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | 26.7 | 26.4 | 23.9 | 21 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | 9.39 | 7.71 | 8.43 | 7.35 |
| FAYETTEVILLE, NC | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.115 | 0.098 | 0.1 | 0.099 | 0.098 | 0.112 | 0.12 | 0.101 | 0.108 |
| 4th highest daily max 8-h average | | ns | 1 | 0.093 | 0.084 | 0.081 | 0.086 | 0.085 | 0.093 | 0.1 | 0.086 | 0.08 |
| PM ₁₀ * | 90th percentile | ns | 1 | 41 | 40 | 35 | 39 | 41 | 41 | 39 | 39 | 39 |
| Weighted annual mean | | ns | 1 | 27.3 | 25.1 | 23.3 | 25.3 | 24.8 | 26.5 | 24.4 | 28 | 28 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | 33.5 | 33 | 27 | 30.6 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | 16.19 | 15.86 | 14.28 | 13.64 |
| FAYETTEVILLE-SPRINGDALE-ROGERS, AR | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.4 | 25 | 25.8 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 12.5 | 11.56 | 10.76 |
| FITCHBURG-LEOMINSTER, MA | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 34.5 | 21.1 | 23.35 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 9.39 | 9.79 | 9.595 |
| FLAGSTAFF, AZ-UT | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.07 | 0.081 | 0.075 | 0.082 | 0.076 | 0.076 | 0.086 | 0.082 | 0.074 |
| 4th highest daily max 8-h average | | ns | 1 | 0.066 | 0.073 | 0.069 | 0.073 | 0.072 | 0.072 | 0.076 | 0.071 | 0.07 |
| FLINT, MI | | | | | | | | | | | | |
| Maximum quarterly value | | ns | 1 | 0.016 | 0.011 | 0.014 | 0.012 | 0.011 | 0.015 | 0.014 | 0.011 | 0.012 |
| SO ₂ | 2nd daily max | down | 1 | 0.017 | 0.017 | 0.016 | 0.012 | 0.012 | 0.014 | 0.011 | 0.015 | 0.014 |
| Annual mean | | down | 1 | 0.005 | 0.004 | 0.003 | 0.002 | 0.002 | 0.002 | 0.003 | 0.004 | 0.002 |
| Ozone | 2nd highest daily max | ns | 1 | 0.106 | 0.09 | 0.097 | 0.113 | 0.094 | 0.104 | 0.108 | 0.086 | 0.108 |
| 4th highest daily max 8-h average | | ns | 1 | 0.068 | 0.077 | 0.082 | 0.089 | 0.081 | 0.089 | 0.089 | 0.072 | 0.091 |
| PM ₁₀ * | 90th percentile | ns | 1 | 40 | 36 | 37 | 31 | 33 | 37 | 33 | 32 | 32 |
| Weighted annual mean | | down | 1 | 23.9 | 20.1 | 21.1 | 20.2 | 20.2 | 20.6 | 19 | 18.6 | 20 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 32.8 | 32.2 | 38 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 12.02 | 12.95 | 13.12 |
| FLORENCE, AL | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.022 | 0.022 | 0.018 | 0.019 | 0.02 | 0.019 | 0.017 | 0.017 | 0.016 |
| Annual mean | | down | 1 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 35.6 | 32.4 | 28.7 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 17.32 | 15.62 | 12.82 |
| FLORENCE, SC | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.7 | 31.3 | 24.3 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 14.37 | 14.4 | 13.11 |
| FORT COLLINS-LOVELAND, CO | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 6.6 | 6 | 5.2 | 5.1 | 5.2 | 4.1 | 5.1 | 3.8 | 3 |
| Ozone | 2nd highest daily max | ns | 2 | 0.091 | 0.095 | 0.089 | 0.092 | 0.088 | 0.092 | 0.085 | 0.093 | 0.086 |
| 4th highest daily max 8-h average | | ns | 2 | 0.068 | 0.072 | 0.072 | 0.069 | 0.07 | 0.076 | 0.069 | 0.074 | 0.069 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 19.7 | 24.7 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 8.3 | 8.63 |
| FORT LAUDERDALE, FL | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 2 | 4.45 | 4.65 | 5.15 | 3.65 | 3.7 | 2.8 | 4.05 | 3.2 | 3.55 |
| SO ₂ | 2nd daily max | ns | 1 | 0.011 | 0.013 | 0.008 | 0.008 | 0.011 | 0.017 | 0.015 | 0.026 | 0.016 |
| Annual mean | | ns | 1 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.002 | 0.002 |
| NO ₂ | Annual mean | ns | 1 | 0.01 | 0.009 | 0.011 | 0.01 | 0.01 | 0.01 | 0.011 | 0.01 | 0.009 |
| Ozone | 2nd highest daily max | ns | 2 | 0.102 | 0.097 | 0.097 | 0.102 | 0.091 | 0.1 | 0.102 | 0.091 | 0.1 |
| 4th highest daily max 8-h average | | ns | 2 | 0.081 | 0.071 | 0.066 | 0.066 | 0.071 | 0.077 | 0.073 | 0.073 | 0.074 |
| PM ₁₀ * | 90th percentile | ns | 3 | 28.667 | 23.333 | 23.667 | 27.667 | 25.333 | 30.333 | 23 | 24 | 29.333 |
| Weighted annual mean | | ns | 3 | 18.967 | 17.2 | 16.767 | 17.967 | 17.733 | 19.967 | 17.3 | 17.1 | 18.033 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 25.2 | 24.55 | 21.6 |
| Weighted annual mean | | NA | 2 | ND | ND | ND | ND | ND | ND | 9.23 | 9.41 | 8.485 |
| FORT MYERS-CAPE CORAL, FL | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 21.2 | 24.5 | 21.9 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 10.12 | 9.55 | 9.21 |
| FORT PIERCE-PORT ST. LUCIE, FL | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 18.7 | 23.4 | 21 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 9.63 | 10.06 | 8.99 |
| FORT SMITH, AR-OK | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 27.3 | 29.5 | 26.2 |
| Weighted annual mean | | NA | 1 | ND | ND | ND | ND | ND | ND | 13.54 | 13.74 | 11.75 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------------------------|------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| FORT WAYNE, IN | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | ns | 1 | 4.7 | 4.7 | 4.7 | 2.7 | 6.3 | 3 | 3.3 | 3.9 | 2.6 |
| Ozone | 2nd highest daily max | ns | 2 | 0.093 | 0.113 | 0.109 | 0.1 | 0.095 | 0.103 | 0.1 | 0.093 | 0.091 |
| | 4th highest daily max 8-h average | ns | 2 | 0.081 | 0.094 | 0.094 | 0.091 | 0.087 | 0.089 | 0.089 | 0.086 | 0.078 |
| PM ₁₀ * | 90th percentile | ns | 1 | 36 | 43 | 44 | 28 | 28 | 39 | 31 | 32 | 33 |
| | Weighted annual mean | ns | 1 | 22.9 | 23.5 | 23.9 | 17.2 | 19.6 | 23.7 | 17 | 20.2 | 18 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 35.5 | 33.6 | 32 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 13.33 | 15.65 | 32.1 |
| FORT WORTH-ARLINGTON, TX | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 3.5 | 2.7 | 3.3 | 2.8 | 2.8 | 2.5 | 2.6 | 2.1 | 2 |
| NO ₂ | Annual mean | ns | 1 | 0.013 | 0.017 | 0.017 | 0.015 | 0.016 | 0.013 | 0.017 | 0.012 | 0.012 |
| Ozone | 2nd highest daily max | ns | 2 | 0.113 | 0.133 | 0.141 | 0.129 | 0.123 | 0.126 | 0.145 | 0.118 | 0.125 |
| | 4th highest daily max 8-h average | ns | 2 | 0.093 | 0.101 | 0.104 | 0.094 | 0.092 | 0.099 | 0.102 | 0.094 | 0.098 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 22.7 | 27.8 | 26.75 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 12.58 | 12.36 | 12.18 |
| FRESNO, CA | | | | | | | | | | | | |
| Maximum quarterly value | | down | 1 | 0.025 | 0.02 | 0.015 | 0.008 | 0.011 | 0.013 | 0.008 | 0.01 | 0.01 |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 4 | 4.175 | 4.925 | 4.225 | 4.15 | 3.5 | 3.5 | 3.4 | 3.35 | 3.1 |
| NO ₂ | Annual mean | down | 4 | 0.021 | 0.02 | 0.02 | 0.019 | 0.018 | 0.018 | 0.021 | 0.018 | 0.018 |
| Ozone | 2nd highest daily max | ns | 4 | 0.14 | 0.127 | 0.134 | 0.14 | 0.126 | 0.155 | 0.129 | 0.134 | 0.134 |
| | 4th highest daily max 8-h average | ns | 4 | 0.107 | 0.098 | 0.102 | 0.107 | 0.101 | 0.118 | 0.102 | 0.105 | 0.106 |
| PM ₁₀ * | 90th percentile | ns | 3 | 91.667 | 66 | 83.333 | 63.333 | 81 | 62 | 96.333 | 76 | 78.333 |
| | Weighted annual mean | ns | 3 | 46.9 | 42.567 | 44.567 | 37.333 | 42.767 | 34.833 | 48.1 | 41.933 | 46.733 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 89.6 | 85.75 | 74.75 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 23.73 | 20.115 | 19.1 |
| GAINESVILLE, FL | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 30 | 33 | 27 | 23 | 32 | 29 | 29 | 31 | 29 |
| | Weighted annual mean | ns | 1 | 19.5 | 18.5 | 17.5 | 17.1 | 20.7 | 19.9 | 19 | 19.9 | 19.7 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 25.9 | 26.5 | 23.25 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 11.28 | 11.505 | 10.215 |
| GALVESTON-TEXAS CITY, TX | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.056 | 0.052 | 0.089 | 0.067 | 0.053 | 0.039 | 0.04 | 0.037 | 0.045 |
| | Annual mean | ns | 1 | 0.005 | 0.006 | 0.006 | 0.014 | 0.006 | 0.004 | 0.007 | 0.004 | 0.005 |
| Ozone | 2nd highest daily max | ns | 1 | 0.176 | 0.125 | 0.198 | 0.107 | 0.175 | 0.146 | 0.172 | 0.127 | 0.113 |
| | 4th highest daily max 8-h average | ns | 1 | 0.114 | 0.088 | 0.14 | 0.08 | 0.097 | 0.095 | 0.108 | 0.09 | 0.076 |
| GARY, IN | | | | | | | | | | | | |
| Maximum quarterly value | | ns | 1 | 0.044 | 0.052 | 0.044 | 0.064 | 0.043 | 0.04 | 0.077 | 0.108 | 0.017 |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 5 | 4.6 | 3.7 | 2.8 | 3.8 | 3.2 | 3.1 | 3.2 | 2.6 |
| SO ₂ | 2nd daily max | down | 1 | 0.044 | 0.055 | 0.039 | 0.031 | 0.032 | 0.055 | 0.028 | 0.025 | 0.03 |
| | Annual mean | down | 1 | 0.008 | 0.008 | 0.008 | 0.007 | 0.008 | 0.009 | 0.007 | 0.006 | 0.004 |
| Ozone | 2nd highest daily max | ns | 2 | 0.1 | 0.11 | 0.118 | 0.112 | 0.113 | 0.109 | 0.11 | 0.094 | 0.106 |
| | 4th highest daily max 8-h average | ns | 2 | 0.083 | 0.088 | 0.097 | 0.094 | 0.093 | 0.085 | 0.095 | 0.081 | 0.087 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 43.8 | 43.6 | 50.2 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 15.87 | 17.38 | 18.11 |
| GOLDSBORO, NC | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 40.6 | 34.4 | 29.2 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 15.42 | 15.77 | 14.65 |
| GRAND FORKS, ND-MN | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 26.3 | 24.6 | 22.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 10.23 | 8.18 | 8.28 |
| GRAND JUNCTION, CO | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 6.1 | 6 | 5.4 | 5.8 | 5.4 | 5.3 | 4.7 | 4.1 | 3.7 |
| PM ₁₀ * | 90th percentile | ns | 1 | 31 | 32 | 31 | 30 | 28 | 29 | 31 | 37 | 35 |
| | Weighted annual mean | ns | 1 | 21.5 | 21.4 | 21.7 | 20.6 | 19.6 | 19.8 | 20 | 23.6 | 23.6 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 18.3 | 18.4 | 20.7 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 6.93 | 7.21 | 8.1 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|--|------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| GRAND RAPIDS-MUSKEGON-HOLLAND, MI | | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | ns | 1 | 3.2 | 4 | 4.6 | 3.3 | 2.4 | 2.9 | 3.5 | 2.6 | 3.1 | 2.8 |
| SO ₂ | 2nd daily max | down | 1 | 0.012 | 0.013 | 0.011 | 0.011 | 0.008 | 0.008 | 0.006 | 0.01 | 0.007 | 0.007 |
| | Annual mean | down | 1 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.001 | 0.002 | 0.002 | 0.002 |
| Ozone | 2nd highest daily max | ns | 4 | 0.103 | 0.113 | 0.129 | 0.122 | 0.107 | 0.109 | 0.111 | 0.112 | 0.112 | 0.116 |
| | 4th highest daily max 8-h average | ns | 4 | 0.083 | 0.088 | 0.101 | 0.09 | 0.086 | 0.088 | 0.093 | 0.076 | 0.089 | 0.095 |
| PM ₁₀ * | 90th percentile | down | 2 | 39 | 46 | 40 | 35.5 | 32 | 38.5 | 36 | 31 | 36.5 | 34 |
| | Weighted annual mean | down | 2 | 21.85 | 26.9 | 20.95 | 20.25 | 18.65 | 21.25 | 18.9 | 18.65 | 20.4 | 18.45 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 36.733 | 33.567 | 37 | 36.2 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 12.977 | 12.917 | 13.693 | 13.113 |
| GREAT FALLS, MT | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 23 | 17.3 | 17.6 |
| | Weighted annual mean | NA | 1 | ND | 6.13 | 5.39 | 5.25 |
| GREELEY, CO | | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 5.8 | 5.2 | 5.3 | 7 | 4.8 | 4.4 | 3.4 | 3.8 | 3.7 | 3.7 |
| Ozone | 2nd highest daily max | ns | 1 | 0.087 | 0.087 | 0.093 | 0.097 | 0.095 | 0.102 | 0.092 | 0.093 | 0.105 | 0.064 |
| | 4th highest daily max 8-h average | ns | 1 | 0.063 | 0.071 | 0.072 | 0.07 | 0.069 | 0.075 | 0.069 | 0.069 | 0.074 | 0.057 |
| PM ₁₀ * | 90th percentile | ns | 1 | 40 | 37 | 34 | 30 | 30 | 30 | 29 | 34 | 33 | 34 |
| | Weighted annual mean | ns | 1 | 22.6 | 23.1 | 19.9 | 17.7 | 17.8 | 16.4 | 17.5 | 20.5 | 20.8 | 21 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 20.4 | 35.7 | 25.9 |
| | Weighted annual mean | NA | 1 | ND | 8.93 | 10.61 | 9.22 |
| GREEN BAY, WI | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.018 | 0.015 | 0.017 | 0.011 | 0.017 | 0.011 | 0.011 | 0.016 | 0.013 | 0.013 |
| | Annual mean | down | 1 | 0.003 | 0.003 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.003 | 0.002 |
| Ozone | 2nd highest daily max | ns | 1 | 0.085 | 0.085 | 0.112 | 0.105 | 0.091 | 0.098 | 0.097 | 0.09 | 0.107 | 0.094 |
| | 4th highest daily max 8-h average | ns | 1 | 0.069 | 0.069 | 0.083 | 0.091 | 0.073 | 0.077 | 0.085 | 0.071 | 0.088 | 0.084 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 33.4 | 32.1 | 33.85 | 28.45 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 10.81 | 10.96 | 11.35 | 10.75 |
| GREENSBORO-WINSTON-SALEM-HIGH POINT, NC | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.022 | 0.021 | 0.025 | 0.026 | 0.023 | 0.023 | 0.02 | 0.019 | 0.016 | 0.024 |
| | Annual mean | down | 1 | 0.006 | 0.007 | 0.007 | 0.007 | 0.007 | 0.006 | 0.005 | 0.005 | 0.005 | 0.005 |
| NO ₂ | Annual mean | down | 1 | 0.017 | 0.017 | 0.016 | 0.016 | 0.017 | 0.017 | 0.016 | 0.016 | 0.016 | 0.014 |
| Ozone | 2nd highest daily max | ns | 2 | 0.112 | 0.104 | 0.114 | 0.106 | 0.11 | 0.117 | 0.112 | 0.11 | 0.109 | 0.124 |
| | 4th highest daily max 8-h average | up | 2 | 0.089 | 0.084 | 0.09 | 0.082 | 0.089 | 0.099 | 0.098 | 0.09 | 0.09 | 0.102 |
| PM ₁₀ * | 90th percentile | ns | 2 | 40.5 | 35.5 | 37.5 | 37.5 | 38 | 41 | 38.5 | 36.5 | 36.5 | 34.5 |
| | Weighted annual mean | down | 2 | 24.8 | 23.95 | 25.25 | 24.65 | 24.2 | 25.2 | 23.9 | 22.3 | 22.7 | 21.95 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 36.8 | 35.633 | 35.267 | 32.533 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 16.897 | 17.04 | 15.667 | 14.88 |
| GREENVILLE, NC | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.108 | 0.086 | 0.098 | 0.097 | 0.122 | 0.109 | 0.109 | 0.109 | 0.091 | 0.106 |
| | 4th highest daily max 8-h average | ns | 1 | 0.091 | 0.074 | 0.082 | 0.086 | 0.097 | 0.089 | 0.093 | 0.082 | 0.077 | 0.091 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 30.5 | 27.8 | 30.6 |
| | Weighted annual mean | NA | 1 | ND | 13.92 | 12.52 | 12.28 |
| GREENVILLE-SPARTANBURG-ANDERSON, SC MS | | | | | | | | | | | | | |
| Maximum quarterly value | | ns | 1 | 0.02 | 0.018 | 0.012 | 0.011 | 0.01 | 0.011 | 0.012 | 0.021 | 0.01 | 0.01 |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 5.4 | 5.5 | 5.3 | 4.6 | 5.6 | 4.3 | 4.8 | 3.7 | 3.4 | 3.3 |
| SO ₂ | 2nd daily max | ns | 1 | 0.012 | 0.016 | 0.007 | 0.012 | 0.014 | 0.015 | 0.009 | 0.011 | 0.013 | 0.014 |
| | Annual mean | up | 1 | 0.003 | 0.003 | 0.001 | 0.002 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| NO ₂ | Annual mean | down | 1 | 0.018 | 0.018 | 0.017 | 0.016 | 0.017 | 0.017 | 0.017 | 0.016 | 0.015 | 0.016 |
| Ozone | 2nd highest daily max | ns | 2 | 0.116 | 0.101 | 0.117 | 0.103 | 0.103 | 0.118 | 0.12 | 0.107 | 0.104 | 0.112 |
| | 4th highest daily max 8-h average | up | 2 | 0.085 | 0.085 | 0.09 | 0.086 | 0.087 | 0.099 | 0.1 | 0.087 | 0.089 | 0.093 |
| PM ₁₀ * | 90th percentile | down | 2 | 41 | 42.5 | 45.5 | 46.5 | 38.5 | 39.5 | 40.5 | 38.5 | 35.5 | 35 |
| | Weighted annual mean | down | 2 | 25.95 | 26.4 | 30.6 | 31.3 | 23.5 | 25 | 25.5 | 23.95 | 22.15 | 21.15 |
| HAGERSTOWN, MD | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 39.9 | 41.6 | 42.7 |
| | Weighted annual mean | NA | 1 | ND | 15.55 | 14.17 | 14.9 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|--|------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|-------|--------|---------------|
| HAMILTON-MIDDLETOWN, OH | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.042 | 0.046 | 0.02 | 0.026 | 0.035 | 0.022 | 0.021 | 0.023 | 0.027 0.034 |
| | Annual mean | ns | 1 | 0.008 | 0.008 | 0.005 | 0.006 | 0.006 | 0.006 | 0.007 | 0.006 | 0.006 0.006 |
| Ozone | 2nd highest daily max | ns | 1 | 0.121 | 0.103 | 0.121 | 0.107 | 0.104 | 0.109 | 0.117 | 0.095 | 0.107 0.115 |
| | 4th highest daily max 8-h average | ns | 1 | 0.086 | 0.087 | 0.089 | 0.092 | 0.088 | 0.089 | 0.096 | 0.082 | 0.083 0.1 |
| PM ₁₀ * | 90th percentile | down | 3 | 62.667 | 54 | 57.333 | 43 | 55 | 53.667 | 48 | 51 | 46 39.333 |
| | Weighted annual mean | down | 3 | 31.567 | 30.667 | 33.433 | 29.133 | 30.933 | 30.733 | 28.1 | 29.867 | 26.567 24.233 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 37 | 38.1 | 41.7 40.7 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 18.82 | 16.96 | 16.43 16.83 |
| HARRISBURG-LEBANON-CARLISLE, PA | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.025 | 0.04 | 0.02 | 0.022 | 0.022 | 0.021 | 0.021 | 0.024 | 0.015 0.013 |
| | Annual mean | down | 1 | 0.006 | 0.007 | 0.005 | 0.006 | 0.007 | 0.006 | 0.005 | 0.005 | 0.005 0.005 |
| NO ₂ | Annual mean | down | 1 | 0.015 | 0.022 | 0.02 | 0.021 | 0.019 | 0.019 | 0.018 | 0.017 | 0.018 0.016 |
| Ozone | 2nd highest daily max | ns | 1 | 0.118 | 0.118 | 0.099 | 0.096 | 0.112 | 0.116 | 0.114 | 0.101 | 0.099 0.126 |
| | 4th highest daily max 8-h average | ns | 1 | 0.095 | 0.091 | 0.084 | 0.078 | 0.084 | 0.097 | 0.095 | 0.079 | 0.086 0.098 |
| PM ₁₀ * | 90th percentile | down | 1 | 45 | 40 | 37 | 38 | 37 | 35 | 34 | 33 | 39 35 |
| | Weighted annual mean | down | 1 | 27.5 | 23.6 | 21.7 | 23.4 | 22.2 | 20.4 | 20.3 | 20.2 | 21.9 19.6 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 39.7 | 45.8 | 47.7 42.7 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 14.39 | 15.69 | 16.5 14.5 |
| HARTFORD, CT | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 7.2 | 7.9 | 7 | 6.45 | 5.9 | 7.1 | 5.5 | 7.3 | 4.5 5.1 |
| SO ₂ | 2nd daily max | down | 1 | 0.023 | 0.031 | 0.023 | 0.022 | 0.025 | 0.019 | 0.019 | 0.021 | 0.023 0.018 |
| | Annual mean | down | 1 | 0.006 | 0.007 | 0.005 | 0.006 | 0.005 | 0.005 | 0.004 | 0.004 | 0.005 0.004 |
| NO ₂ | Annual mean | ns | 1 | 0.018 | 0.02 | 0.017 | 0.016 | 0.018 | 0.02 | 0.018 | 0.017 | 0.02 0.017 |
| Ozone | 2nd highest daily max | ns | 3 | 0.146 | 0.133 | 0.134 | 0.098 | 0.143 | 0.12 | 0.138 | 0.106 | 0.137 0.14 |
| | 4th highest daily max 8-h average | ns | 3 | 0.1 | 0.099 | 0.097 | 0.082 | 0.099 | 0.09 | 0.097 | 0.082 | 0.099 0.104 |
| PM ₁₀ * | 90th percentile | ns | 1 | 22 | 25 | 19 | 23 | 27 | 22 | 23 | 22 | 20 20 |
| | Weighted annual mean | down | 1 | 12.9 | 14.3 | 12.1 | 12.4 | 13.8 | 13.7 | 11.9 | 11.3 | 10.8 10.5 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 29.5 | 32.3 | 32.8 31.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 10.79 | 10.67 | 12.27 11.28 |
| HATTIESBURG, MS | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 29.6 | 30 31.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 14.93 | 13.56 12.78 |
| HICKORY-MORGANTON-LENOIR, NC | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | up | 1 | 0.092 | 0.092 | 0.093 | 0.094 | 0.099 | 0.133 | 0.106 | 0.107 | 0.099 0.111 |
| | 4th highest daily max 8-h average | up | 1 | 0.075 | 0.075 | 0.077 | 0.078 | 0.08 | 0.096 | 0.082 | 0.091 | 0.088 0.095 |
| PM ₁₀ * | 90th percentile | ns | 1 | 44 | 39 | 36 | 37 | 37 | 37 | 43 | 33 | 33 37 |
| | Weighted annual mean | down | 1 | 26.4 | 26.3 | 23.2 | 24.1 | 23.7 | 23.1 | 25 | 22 | 21 22 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 34 | 34.2 | 32 33.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 17.43 | 17.35 | 15.98 15.16 |
| HONOLULU, HI | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 2 | 2 | 1.8 | 1.85 | 1.9 | 1.7 | 1.45 | 1.25 | 1.3 | 1.15 1 |
| SO ₂ | 2nd daily max | down | 2 | 0.011 | 0.007 | 0.004 | 0.008 | 0.004 | 0.008 | 0.003 | 0.005 | 0.004 0.003 |
| | Annual mean | ns | 2 | 0.002 | 0.001 | 0.001 | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 0.001 |
| NO ₂ | Annual mean | ns | 1 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 0.004 |
| Ozone | 2nd highest daily max | ns | 1 | 0.055 | 0.055 | 0.056 | 0.047 | 0.053 | 0.056 | 0.054 | 0.048 | 0.051 0.053 |
| | 4th highest daily max 8-h average | down | 1 | 0.049 | 0.052 | 0.051 | 0.041 | 0.047 | 0.049 | 0.048 | 0.044 | 0.042 0.043 |
| PM ₁₀ * | 90th percentile | ns | 2 | 24.5 | 22.5 | 21 | 23 | 21.5 | 23 | 18.5 | 23 | 24 24 |
| | Weighted annual mean | down | 2 | 17.7 | 16.25 | 16.1 | 17.05 | 16.1 | 16 | 13.95 | 15.6 | 16.05 15.8 |
| HOUMA, LA | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 28.7 | 26.2 17.8 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 12.38 | 10.89 9.33 |
| HOUSTON, TX | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 2 | 4.75 | 4.15 | 3.8 | 4.85 | 3.45 | 3.45 | 3.35 | 3.2 | 3.35 2.8 |
| SO ₂ | 2nd daily max | down | 2 | 0.023 | 0.02 | 0.02 | 0.024 | 0.018 | 0.019 | 0.016 | 0.021 | 0.017 0.016 |
| | Annual mean | down | 2 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 0.003 |
| NO ₂ | Annual mean | ns | 2 | 0.016 | 0.017 | 0.019 | 0.019 | 0.018 | 0.016 | 0.018 | 0.016 | 0.017 0.015 |
| Ozone | 2nd highest daily max | ns | 2 | 0.166 | 0.154 | 0.173 | 0.154 | 0.203 | 0.185 | 0.144 | 0.161 | 0.139 0.137 |
| | 4th highest daily max 8-h average | ns | 2 | 0.09 | 0.099 | 0.114 | 0.113 | 0.113 | 0.119 | 0.102 | 0.106 | 0.097 0.096 |
| PM ₁₀ * | 90th percentile | ns | 2 | 56 | 62 | 59.5 | 46.5 | 59.5 | 75 | 57.5 | 57 | 48 47 |
| | Weighted annual mean | ns | 2 | 34.6 | 37.6 | 33.85 | 30.5 | 34.65 | 40.25 | 35.6 | 35.4 | 30.65 28.5 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 25.6 | 32.2 31.35 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 12.745 | 12.4 12.925 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|-------------------------------------|------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| HUNTINGTON-ASHLAND, WV-KY-OH | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 3 | 0.05 | 0.048 | 0.04 | 0.031 | 0.034 | 0.031 | 0.029 | 0.038 | 0.028 |
| | Annual mean | down | 3 | 0.012 | 0.01 | 0.01 | 0.01 | 0.009 | 0.009 | 0.009 | 0.01 | 0.008 |
| Ozone | 2nd highest daily max | ns | 1 | 0.119 | 0.12 | 0.122 | 0.113 | 0.124 | 0.136 | 0.115 | 0.092 | 0.11 |
| | 4th highest daily max 8-h average | ns | 1 | 0.099 | 0.097 | 0.092 | 0.086 | 0.086 | 0.105 | 0.096 | 0.081 | 0.087 |
| PM ₁₀ * | 90th percentile | down | 1 | 61 | 65 | 64 | 52 | 62 | 53 | 68 | 50 | 47 |
| | Weighted annual mean | ns | 1 | 33.1 | 39 | 38.4 | 37 | 39 | 35.2 | 39.1 | 32.7 | 30 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | 35.25 | 36.8 | 41.15 | 42.55 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | 16.175 | 16.63 | 16.385 | 16.135 |
| HUNTSVILLE, AL | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 4 | 3.5 | 3.6 | 3 | 3.1 | 3.3 | 4.3 | 2.3 | 2.3 |
| Ozone | 2nd highest daily max | ns | 1 | 0.112 | 0.107 | 0.102 | 0.096 | 0.096 | 0.118 | 0.106 | 0.111 | 0.088 |
| | 4th highest daily max 8-h average | ns | 1 | 0.087 | 0.075 | 0.08 | 0.081 | 0.086 | 0.092 | 0.093 | 0.088 | 0.08 |
| PM ₁₀ * | 90th percentile | ns | 3 | 38.667 | 34.333 | 34.333 | 32.667 | 37 | 36.667 | 36.667 | 37.333 | 35.333 |
| | Weighted annual mean | ns | 3 | 23.267 | 23.233 | 22.1 | 20.7 | 20.867 | 22.633 | 23.4 | 24 | 21.033 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | 30.9 | 41.5 | 29.7 | 34.1 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | 15.61 | 16.28 | 14.6 | 13.8 |
| INDIANAPOLIS, IN | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 2 | 4 | 3.45 | 3.85 | 2.75 | 3.15 | 2.65 | 2.4 | 3.3 | 2.35 |
| SO ₂ | 2nd daily max | ns | 3 | 0.04 | 0.041 | 0.022 | 0.027 | 0.025 | 0.022 | 0.021 | 0.023 | 0.022 |
| | Annual mean | down | 3 | 0.009 | 0.008 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 | 0.006 | 0.005 |
| NO ₂ | Annual mean | ns | 1 | 0.018 | 0.019 | 0.02 | 0.018 | 0.015 | 0.019 | 0.018 | 0.017 | 0.018 |
| Ozone | 2nd highest daily max | ns | 2 | 0.094 | 0.107 | 0.108 | 0.118 | 0.101 | 0.105 | 0.106 | 0.097 | 0.092 |
| | 4th highest daily max 8-h average | ns | 2 | 0.079 | 0.09 | 0.091 | 0.093 | 0.086 | 0.09 | 0.095 | 0.08 | 0.103 |
| PM ₁₀ * | 90th percentile | down | 2 | 54 | 57.5 | 49.5 | 34 | 40.5 | 43.5 | 37 | 38.5 | 32.5 |
| | Weighted annual mean | down | 2 | 31.4 | 32 | 29.6 | 22 | 24.05 | 25.45 | 21 | 22.3 | 20.7 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | 39.2 | 38.725 | 41.8 | 40.75 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | 17.32 | 17.618 | 17.855 | 17.56 |
| IOWA CITY, IA | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 32.4 | 28.4 | 34.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.32 | 10.93 | 11.67 |
| JACKSON, MS | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 6.2 | 5.1 | 4.4 | 4.8 | 3.8 | 3.7 | 5 | 3.2 | 4.2 |
| SO ₂ | 2nd daily max | ns | 1 | 0.01 | 0.008 | 0.007 | 0.008 | 0.007 | 0.008 | 0.007 | 0.006 | 0.006 |
| | Annual mean | ns | 1 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| Ozone | 2nd highest daily max | ns | 2 | 0.089 | 0.086 | 0.09 | 0.093 | 0.095 | 0.105 | 0.103 | 0.096 | 0.091 |
| | 4th highest daily max 8-h average | ns | 2 | 0.073 | 0.073 | 0.076 | 0.078 | 0.077 | 0.084 | 0.083 | 0.08 | 0.076 |
| PM ₁₀ * | 90th percentile | ns | 1 | 42 | 35 | 39 | 35 | 44 | 48 | 38 | 36 | 33 |
| | Weighted annual mean | ns | 1 | 22.8 | 22.1 | 21.9 | 21.8 | 25.6 | 28 | 24.9 | 23.5 | 20.6 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 33.65 | 35.633 | 29.2 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 16.195 | 15.233 | 13.45 |
| JACKSON, TN | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 37.5 | 30.4 | 27.4 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 16.22 | 14.99 | 13.56 |
| JACKSONVILLE, FL | | | | | | | | | | | | |
| CO | Maximum quarterly value | ns | 1 | 0.022 | 0.017 | 0.027 | 0.023 | 0.015 | 0.017 | 0.017 | 0.029 | 0.017 |
| SO ₂ | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 4.8 | 3.4 | 3.7 | 3.1 | 2.8 | 2.8 | 3.9 | 2.6 | 2.7 |
| | 2nd daily max | ns | 2 | 0.032 | 0.041 | 0.033 | 0.024 | 0.025 | 0.03 | 0.028 | 0.032 | 0.027 |
| | Annual mean | ns | 2 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.004 | 0.004 | 0.005 | 0.004 |
| NO ₂ | Annual mean | ns | 1 | 0.015 | 0.014 | 0.016 | 0.015 | 0.014 | 0.015 | 0.016 | 0.015 | 0.013 |
| Ozone | 2nd highest daily max | ns | 1 | 0.103 | 0.087 | 0.1 | 0.086 | 0.085 | 0.1 | 0.103 | 0.09 | 0.092 |
| | 4th highest daily max 8-h average | ns | 1 | 0.08 | 0.069 | 0.068 | 0.073 | 0.073 | 0.08 | 0.08 | 0.071 | 0.072 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 30.1 | 26.2 |
| | Weighted annual mean | NA | 1 | ND | 12.1 | 10.94 |
| JACKSONVILLE, NC | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 35.7 | 27.7 | 26 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.7 | 12.28 | 11.45 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------------------------------|------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| JAMESTOWN, NY | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.032 | 0.033 | 0.023 | 0.027 | 0.019 | 0.019 | 0.022 | 0.023 | 0.02 0.016 |
| | Annual mean | down | 1 | 0.007 | 0.006 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 0.004 |
| Ozone | 2nd highest daily max | ns | 1 | 0.104 | 0.094 | 0.104 | 0.097 | 0.101 | 0.112 | 0.101 | 0.101 | 0.097 0.109 |
| | 4th highest daily max 8-h average | ns | 1 | 0.081 | 0.08 | 0.089 | 0.081 | 0.085 | 0.095 | 0.087 | 0.083 | 0.085 0.094 |
| PM ₁₀ * | 90th percentile | ns | 1 | 26 | 32 | 32 | 28 | 32 | 35 | 32 | 29 | 25 21 |
| | Weighted annual mean | down | 1 | 15.4 | 14.4 | 15.7 | 15.1 | 15.4 | 16.9 | 14.1 | 13.7 | 11.7 12.4 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 30.6 | 34.2 37.8 |
| | Weighted annual mean | NA | 1 | ND | 11.38 | 11.06 11.25 |
| JANESVILLE-BELoit, WI | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | down | 1 | 0.108 | 0.108 | 0.103 | 0.103 | 0.097 | 0.1 | 0.105 | 0.098 | 0.093 0.098 |
| | 4th highest daily max 8-h average | ns | 1 | 0.077 | 0.077 | 0.087 | 0.085 | 0.085 | 0.084 | 0.093 | 0.083 | 0.084 0.087 |
| JERSEY CITY, NJ | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 5.6 | 5.9 | 6.2 | 4.9 | 4.3 | 4.1 | 3.9 | 3.8 | 3 2.8 |
| SO ₂ | 2nd daily max | down | 2 | 0.03 | 0.036 | 0.026 | 0.027 | 0.025 | 0.022 | 0.024 | 0.024 | 0.027 0.022 |
| | Annual mean | down | 2 | 0.009 | 0.009 | 0.007 | 0.008 | 0.008 | 0.007 | 0.007 | 0.007 | 0.008 0.006 |
| NO ₂ | Annual mean | ns | 1 | 0.027 | 0.026 | 0.026 | 0.027 | 0.026 | 0.027 | 0.026 | 0.026 | 0.026 0.023 |
| Ozone | 2nd highest daily max | ns | 1 | 0.131 | 0.118 | 0.125 | 0.12 | 0.119 | 0.118 | 0.139 | 0.103 | 0.132 0.109 |
| | 4th highest daily max 8-h average | ns | 1 | 0.103 | 0.095 | 0.104 | 0.087 | 0.105 | 0.089 | 0.106 | 0.082 | 0.091 0.09 |
| PM ₁₀ * | 90th percentile | ns | 1 | 54 | 62 | 48 | 51 | 50 | 42 | 43 | 50 | 53 50 |
| | Weighted annual mean | down | 1 | 34.3 | 38.8 | 30.8 | 32.8 | 30.6 | 26.9 | 27.8 | 30.6 | 29.3 28.3 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 46 | 39.5 34.3 |
| | Weighted annual mean | NA | 1 | ND | 16.13 | 16.83 14.1 14.35 |
| JOHNSON CITY-KINGSPORT-BRISTOL, TN-VA | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 6.5 | 3.4 | 3.1 | 3 | 3.5 | 3.4 | 2.8 | 2.2 | 2.1 1.9 |
| SO ₂ | 2nd daily max | ns | 1 | 0.045 | 0.05 | 0.038 | 0.05 | 0.042 | 0.039 | 0.038 | 0.043 | 0.037 0.044 |
| | Annual mean | ns | 1 | 0.01 | 0.011 | 0.01 | 0.012 | 0.011 | 0.011 | 0.01 | 0.011 | 0.01 0.008 |
| NO ₂ | Annual mean | down | 1 | 0.017 | 0.017 | 0.018 | 0.018 | 0.018 | 0.017 | 0.016 | 0.015 | 0.015 0.014 |
| Ozone | 2nd highest daily max | ns | 1 | 0.125 | 0.103 | 0.114 | 0.099 | 0.111 | 0.115 | 0.106 | 0.109 | 0.11 0.109 |
| | 4th highest daily max 8-h average | ns | 1 | 0.088 | 0.083 | 0.091 | 0.082 | 0.082 | 0.096 | 0.086 | 0.092 | 0.085 0.093 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 42.2 | 37.1 34 |
| | Weighted annual mean | NA | 1 | ND | 17.17 | 15.4 14.3 |
| JOHNSTOWN, PA | | | | | | | | | | | | |
| CO | 2nd max (daily-nonoverlapping 8-h) | down | 1 | 4.2 | 4.1 | 3.5 | 4.8 | 2.7 | 3.1 | 2.8 | 2 | 2.1 2.6 |
| SO ₂ | 2nd daily max | down | 1 | 0.049 | 0.08 | 0.042 | 0.034 | 0.03 | 0.027 | 0.025 | 0.026 | 0.031 0.025 |
| | Annual mean | down | 1 | 0.015 | 0.014 | 0.012 | 0.011 | 0.009 | 0.008 | 0.009 | 0.007 | 0.008 0.007 |
| NO ₂ | Annual mean | down | 1 | 0.017 | 0.018 | 0.015 | 0.018 | 0.016 | 0.015 | 0.015 | 0.015 | 0.014 0.012 |
| Ozone | 2nd highest daily max | up | 1 | 0.099 | 0.094 | 0.101 | 0.098 | 0.104 | 0.124 | 0.107 | 0.104 | 0.106 0.106 |
| | 4th highest daily max 8-h average | ns | 1 | 0.083 | 0.083 | 0.09 | 0.083 | 0.092 | 0.098 | 0.09 | 0.086 | 0.09 0.088 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 31 | 34.1 40.1 46.6 |
| | Weighted annual mean | NA | 1 | ND | 14.78 | 15.34 15.85 16.09 |
| JONESBORO, AR | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 27.9 | 28.6 31.5 |
| | Weighted annual mean | NA | 1 | ND | 14.64 | 12.69 11.16 |
| JOPLIN, MO | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 26.7 | 29.5 28.7 31.5 |
| | Weighted annual mean | NA | 1 | ND | 13.11 | 13.49 14.48 13.9 |
| KALAMAZOO-BATTLE CREEK, MI | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 40 | 44 | 50 | 33 | 38 | 47 | 44 | 49 | 49 49 |
| | Weighted annual mean | ns | 1 | 24 | 25.9 | 26 | 22 | 22.6 | 26.7 | 22.5 | 26.3 | 26.3 26.3 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 38 | 35.5 40 32.3 |
| | Weighted annual mean | NA | 1 | ND | 14.89 | 15.1 15.63 14.78 |
| KANSAS CITY, MO-KS | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.025 | 0.033 | 0.023 | 0.033 | 0.021 | 0.01 | 0.009 | 0.039 | 0.009 0.015 |
| | Annual mean | ns | 1 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.002 | 0.002 | 0.004 | 0.002 0.002 |
| NO ₂ | Annual mean | ns | 1 | 0.009 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.008 0.008 |
| Ozone | 2nd highest daily max | ns | 1 | 0.114 | 0.112 | 0.131 | 0.114 | 0.121 | 0.133 | 0.111 | 0.115 | 0.106 0.105 |
| | 4th highest daily max 8-h average | ns | 1 | 0.082 | 0.09 | 0.099 | 0.087 | 0.098 | 0.095 | 0.082 | 0.091 | 0.079 0.087 |
| PM ₁₀ * | 90th percentile | ns | 1 | 43 | 47 | 41 | 58 | 38 | 47 | 41 | 47 | 47 53 |
| | Weighted annual mean | ns | 1 | 30.7 | 33.8 | 19.1 | 32.6 | 26.2 | 29.7 | 27.8 | 29.1 | 31.6 36.2 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | 28.1 | 27.333 29.567 29.867 |
| | Weighted annual mean | NA | 3 | ND | 12.68 | 12.647 13.333 13.213 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|--|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| LAS VEGAS, NV-AZ | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.099 | 0.099 | 0.086 | 0.096 | 0.09 | 0.103 | 0.09 | 0.086 | 0.092 | 0.096 |
| | 4th highest daily max 8-h average | ns | 1 | 0.082 | 0.077 | 0.074 | 0.082 | 0.075 | 0.084 | 0.074 | 0.074 | 0.07 | 0.078 |
| PM ₁₀ * | 90th percentile | down | 2 | 81.5 | 77.5 | 82.5 | 83 | 76 | 69.75 | 70 | 63 | 65.5 | 68 |
| | Weighted annual mean | ns | 2 | 43.4 | 45.55 | 45.2 | 51.7 | 47.5 | 41.95 | 40.8 | 38.4 | 40.4 | 45.7 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 32.6 | 31.6 | 33.3 | 28.8 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 11.71 | 10.53 | 10.62 | 11.68 |
| LAWRENCE, MA-NH | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.027 | 0.032 | 0.033 | 0.023 | 0.027 | 0.031 | 0.021 | 0.02 | 0.021 | 0.015 |
| | Annual mean | down | 1 | 0.007 | 0.007 | 0.007 | 0.005 | 0.006 | 0.008 | 0.005 | 0.004 | 0.004 | 0.004 |
| Ozone | 2nd highest daily max | ns | 1 | 0.1 | 0.101 | 0.081 | 0.092 | 0.097 | 0.096 | 0.09 | 0.072 | 0.081 | 0.124 |
| | 4th highest daily max 8-h average | ns | 1 | 0.076 | 0.082 | 0.069 | 0.079 | 0.078 | 0.076 | 0.068 | 0.06 | 0.062 | 0.088 |
| LAWTON, OK | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 2.6 | 1.9 | 3.1 | 2.667 | 2.233 | 1.8 | 1.7 | 1.4 | 2.2 | 2.1 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 19.2 | 26.2 | 25.2 |
| | Weighted annual mean | NA | 1 | ND | 9.08 | 9.91 | 9.35 |
| LEWISTON-AUBURN, ME | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.025 | 0.025 | 0.02 | 0.018 | 0.017 | 0.019 | 0.016 | 0.018 | 0.015 | 0.016 |
| | Annual mean | down | 1 | 0.007 | 0.006 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.004 | 0.004 |
| PM ₁₀ * | 90th percentile | ns | 1 | 50 | 35 | 37 | 31 | 35 | 31 | 31 | 28 | 37 | 37 |
| | Weighted annual mean | ns | 1 | 24.3 | 20.2 | 19.8 | 20 | 20.6 | 18.2 | 18.6 | 17.5 | 20.7 | 18.8 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 35.7 | 25.8 | 32.5 | 30.3 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 9.99 | 9.6 | 11.31 | 10.45 |
| LEXINGTON, KY | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.026 | 0.037 | 0.016 | 0.02 | 0.016 | 0.023 | 0.02 | 0.02 | 0.029 | 0.016 |
| | Annual mean | down | 1 | 0.007 | 0.008 | 0.006 | 0.006 | 0.006 | 0.006 | 0.008 | 0.005 | 0.005 | 0.004 |
| NO ₂ | Annual mean | down | 1 | 0.017 | 0.016 | 0.017 | 0.014 | 0.014 | 0.011 | 0.013 | 0.013 | 0.013 | 0.012 |
| Ozone | 2nd highest daily max | ns | 2 | 0.102 | 0.102 | 0.103 | 0.089 | 0.098 | 0.104 | 0.108 | 0.085 | 0.088 | 0.095 |
| | 4th highest daily max 8-h average | ns | 2 | 0.081 | 0.086 | 0.088 | 0.081 | 0.081 | 0.089 | 0.087 | 0.077 | 0.077 | 0.083 |
| PM ₁₀ * | 90th percentile | down | 2 | 42 | 46 | 39.5 | 37.5 | 37 | 40 | 40 | 37.5 | 35 | 36.5 |
| | Weighted annual mean | down | 2 | 23.85 | 27.6 | 22.8 | 23.1 | 21.85 | 23 | 22.55 | 22.95 | 22.2 | 21.45 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 35.2 | 37.45 | 34.2 | 41.3 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 15.475 | 16.59 | 15.955 | 15.32 |
| LIMA, OH | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.023 | 0.036 | 0.015 | 0.015 | 0.016 | 0.017 | 0.013 | 0.015 | 0.013 | 0.01 |
| | Annual mean | ns | 1 | 0.005 | 0.005 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| Ozone | 2nd highest daily max | ns | 1 | 0.099 | 0.102 | 0.106 | 0.11 | 0.091 | 0.102 | 0.107 | 0.1 | 0.096 | 0.109 |
| | 4th highest daily max 8-h average | ns | 1 | 0.09 | 0.089 | 0.092 | 0.092 | 0.083 | 0.089 | 0.093 | 0.085 | 0.081 | 0.098 |
| PM ₁₀ * | 90th percentile | down | 1 | 40 | 42 | 38 | 38 | 43 | 37 | 26 | 36 | 29 | 36 |
| | Weighted annual mean | down | 1 | 27.9 | 30.6 | 27.2 | 24.9 | 24 | 24.3 | 16.6 | 24.6 | 20.8 | 24.4 |
| LINCOLN, NE | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 5.1 | 5.3 | 6.2 | 4.7 | 6.9 | 6 | 5.7 | 2.9 | 4 | 3.7 |
| Ozone | 2nd highest daily max | ns | 1 | 0.057 | 0.075 | 0.07 | 0.06 | 0.061 | 0.068 | 0.062 | 0.072 | 0.061 | 0.063 |
| | 4th highest daily max 8-h average | ns | 1 | 0.049 | 0.062 | 0.06 | 0.054 | 0.054 | 0.058 | 0.053 | 0.057 | 0.051 | 0.054 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 25.2 | 25.1 | 23.4 | 26 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 10.57 | 10.25 | 10.08 | 9.55 |
| LITTLE ROCK-NORTH LITTLE ROCK, AR | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.017 | 0.009 | 0.008 | 0.009 | 0.006 | 0.006 | 0.005 | 0.007 | 0.005 | 0.005 |
| | Annual mean | down | 1 | 0.006 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| NO ₂ | Annual mean | ns | 1 | 0.009 | 0.011 | 0.011 | 0.011 | 0.01 | 0.011 | 0.011 | 0.01 | 0.01 | 0.01 |
| Ozone | 2nd highest daily max | ns | 2 | 0.096 | 0.09 | 0.106 | 0.096 | 0.099 | 0.096 | 0.103 | 0.113 | 0.102 | 0.101 |
| | 4th highest daily max 8-h average | up | 2 | 0.076 | 0.076 | 0.086 | 0.078 | 0.077 | 0.078 | 0.083 | 0.09 | 0.079 | 0.085 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 33.5 | 32 | 31.9 |
| | Weighted annual mean | NA | 1 | ND | 15.47 | 14.72 | 13.24 |
| LONGVIEW-MARSHALL, TX | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.114 | 0.104 | 0.145 | 0.106 | 0.124 | 0.129 | 0.134 | 0.131 | 0.111 | 0.11 |
| | 4th highest daily max 8-h average | ns | 1 | 0.093 | 0.081 | 0.102 | 0.082 | 0.091 | 0.104 | 0.105 | 0.099 | 0.082 | 0.084 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 28.8 | 28 | 39.2 |
| | Weighted annual mean | NA | 1 | ND | 13.41 | 12.18 | 12.36 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|-------------------------------------|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|
| LOS ANGELES-LONG BEACH, CA | | | | | | | | | | | | | |
| CO | Maximum quarterly value | ns | 2 | 0.088 | 0.072 | 0.058 | 0.053 | 0.067 | 0.045 | 0.094 | 0.059 | 0.08 | 0.036 |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 4 | 8.725 | 10.75 | 9.525 | 9.25 | 8.55 | 7.575 | 7.475 | 6.5 | 5.025 | 5.125 |
| SO ₂ | 2nd daily max | ns | 2 | 0.008 | 0.006 | 0.005 | 0.006 | 0.006 | 0.007 | 0.006 | 0.006 | 0.006 | 0.007 |
| NO ₂ | Annual mean | ns | 2 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| Ozone | Annual mean | down | 3 | 0.039 | 0.046 | 0.045 | 0.043 | 0.039 | 0.039 | 0.041 | 0.039 | 0.037 | 0.035 |
| Ozone | 2nd highest daily max | down | 4 | 0.15 | 0.165 | 0.14 | 0.126 | 0.112 | 0.138 | 0.101 | 0.118 | 0.104 | 0.103 |
| PM ₁₀ * | 4th highest daily max 8-h average | down | 4 | 0.098 | 0.101 | 0.089 | 0.085 | 0.081 | 0.088 | 0.07 | 0.08 | 0.074 | 0.073 |
| PM ₁₀ * | 90th percentile | ns | 2 | 74.5 | 62.5 | 73.5 | 71 | 70 | 62.5 | 75 | 64.5 | 67 | 58 |
| PM ₁₀ * | Weighted annual mean | ns | 2 | 44 | 41.1 | 45.15 | 43.35 | 45.55 | 38.3 | 50 | 42.7 | 43.1 | 41.75 |
| PM _{2.5} * | 98th percentile | NA | 4 | ND | ND | ND | ND | ND | ND | 53.775 | 66.475 | 65.025 | 55.225 |
| PM _{2.5} * | Weighted annual mean | NA | 4 | ND | ND | ND | ND | ND | ND | 23.955 | 23.211 | 24.325 | 23.355 |
| LOUISVILLE, KY-IN | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 4.5 | 4.6 | 3.6 | 3.4 | 3.8 | 3.8 | 3.3 | 3.8 | 3.9 | 4.8 |
| SO ₂ | 2nd daily max | down | 2 | 0.038 | 0.038 | 0.036 | 0.033 | 0.029 | 0.027 | 0.027 | 0.033 | 0.031 | 0.024 |
| NO ₂ | Annual mean | down | 2 | 0.011 | 0.011 | 0.01 | 0.008 | 0.006 | 0.005 | 0.009 | 0.007 | 0.005 | 0.005 |
| Ozone | Annual mean | ns | 1 | 0.026 | 0.026 | 0.022 | 0.02 | 0.02 | 0.023 | 0.022 | 0.022 | 0.023 | 0.02 |
| Ozone | 2nd highest daily max | ns | 2 | 0.123 | 0.124 | 0.124 | 0.109 | 0.126 | 0.136 | 0.114 | 0.097 | 0.101 | 0.12 |
| PM ₁₀ * | 4th highest daily max 8-h average | ns | 2 | 0.096 | 0.099 | 0.097 | 0.087 | 0.091 | 0.102 | 0.092 | 0.081 | 0.081 | 0.099 |
| PM ₁₀ * | 90th percentile | ns | 2 | 54.5 | 45.5 | 49 | 49 | 49.5 | 43 | 44.5 | 57.5 | 48.75 | 42 |
| PM ₁₀ * | Weighted annual mean | ns | 2 | 29.65 | 30.5 | 29 | 28.25 | 30.45 | 26.35 | 26.35 | 31.1 | 28.7 | 25.9 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 39.267 | 37.9 | 41.383 | 44.233 |
| PM _{2.5} * | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 16.443 | 16.673 | 16.908 | 16.41 |
| LOWELL, MA-NH | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.1 | 6.5 | 7.8 | 4.5 | 3.6 | 3.4 | 4.2 | 3.2 | 2.7 | 2.4 |
| LUBBOCK, TX | | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 30 | 33 | 34 | 34 | 27 | 37 | 26 | 32 | 29 | 29 |
| PM ₁₀ * | Weighted annual mean | ns | 1 | 19.9 | 23 | 20.8 | 21.7 | 16.7 | 20.5 | 18.1 | 19 | 19.7 | 19.7 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 18.5 | 17.2 | 21.3 |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | ND | 7.42 | 7.66 | 7.55 |
| MACON, GA | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 49.2 | 36.45 | 31 | 31.75 |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 18.21 | 17.505 | 14.935 | 14.635 |
| MADISON, WI | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.079 | 0.082 | 0.1 | 0.094 | 0.088 | 0.089 | 0.098 | 0.087 | 0.088 | 0.09 |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.066 | 0.071 | 0.08 | 0.079 | 0.079 | 0.076 | 0.085 | 0.071 | 0.078 | 0.08 |
| PM ₁₀ * | 90th percentile | ns | 1 | 37 | 33 | 43 | 30 | 34 | 43 | 38 | 34 | 32 | 31 |
| PM ₁₀ * | Weighted annual mean | ns | 1 | 21 | 22.4 | 22.8 | 19.6 | 20.3 | 26.6 | 20.8 | 22 | 22 | 19 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 33.4 | 34.2 | 36.6 | 32.7 |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 13.43 | 12.75 | 13.31 | 12.31 |
| MANSFIELD, OH | | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | down | 1 | 44 | 49 | 42 | 40 | 40 | 41 | 39 | 37 | 37 | 37 |
| PM ₁₀ * | Weighted annual mean | down | 1 | 27.7 | 29.2 | 24.7 | 24.3 | 23.3 | 23.8 | 22.6 | 23.7 | 23.7 | 23.7 |
| MAYAGUEZ, PR | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 18.8 | 16.4 | 15.7 | 16.7 |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 8.79 | 7.91 | 8.08 | 7.8 |
| MCALLEN-EDINBURG-MISSION, TX | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 22.4 | 21.45 | 28.55 |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | ND | 10.835 | 10.52 | 10.48 |
| MEDFORD-ASHLAND, OR | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.081 | 0.087 | 0.091 | 0.101 | 0.074 | 0.117 | 0.077 | 0.079 | 0.081 | 0.099 |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.066 | 0.068 | 0.071 | 0.075 | 0.063 | 0.085 | 0.065 | 0.067 | 0.064 | 0.078 |
| PM ₁₀ * | 90th percentile | down | 3 | 50.667 | 45.667 | 37.333 | 37 | 36.333 | 33 | 42 | 38.333 | 34.667 | 36.667 |
| PM ₁₀ * | Weighted annual mean | down | 3 | 28.767 | 27.6 | 22.067 | 21.167 | 22.2 | 21 | 24.1 | 20.933 | 19.8 | 21.033 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 33.95 | 34.6 | 26.1 | 33.6 |
| PM _{2.5} * | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 9.08 | 9.447 | 8.673 | 10.37 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEMPHIS, TN-AR-MS | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 8.5 | 7.8 | 6.2 | 5 | 4.2 | 5.1 | 4.6 | 4.4 | 4.1 |
| NO ₂ | Annual mean | ns | 1 | 0.026 | 0.027 | 0.027 | 0.024 | 0.028 | 0.029 | 0.025 | 0.025 | 0.025 |
| Ozone | 2nd highest daily max | ns | 1 | 0.102 | 0.109 | 0.14 | 0.114 | 0.122 | 0.1 | 0.13 | 0.112 | 0.121 |
| | 4th highest daily max 8-h average | ns | 1 | 0.077 | 0.084 | 0.099 | 0.096 | 0.091 | 0.085 | 0.095 | 0.091 | 0.092 |
| PM ₁₀ * | 90th percentile | down | 2 | 49.5 | 45.5 | 47 | 39.5 | 45.5 | 41.5 | 42 | 37.5 | 36 |
| | Weighted annual mean | down | 2 | 29.55 | 28.05 | 28.7 | 26.15 | 27.55 | 25.8 | 26.1 | 26.2 | 23.9 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 34.9 | 36 | 31.9 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 15.85 | 16.3 | 14.53 |
| MERCED, CA | | | | | | | | | | | | |
| NO ₂ | Annual mean | ns | 1 | 0.015 | 0.013 | 0.012 | 0.012 | 0.013 | 0.011 | 0.012 | 0.012 | 0.012 |
| Ozone | 2nd highest daily max | ns | 1 | 0.12 | 0.119 | 0.13 | 0.124 | 0.09 | 0.14 | 0.125 | 0.12 | 0.113 |
| | 4th highest daily max 8-h average | ns | 1 | 0.096 | 0.097 | 0.107 | 0.102 | 0.074 | 0.112 | 0.105 | 0.103 | 0.096 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 68.4 | 70.1 | 55.1 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 17.28 | 16.75 | 18.74 |
| MIAMI, FL | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.5 | 4.9 | 5.1 | 4.6 | 4.1 | 3.4 | 3.9 | 3.4 | 4.2 |
| SO ₂ | 2nd daily max | ns | 1 | 0.004 | 0.004 | 0.004 | 0.005 | 0.004 | 0.004 | 0.003 | 0.003 | 0.004 |
| | Annual mean | ns | 1 | 0.001 | 0.001 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| NO ₂ | Annual mean | ns | 2 | 0.012 | 0.01 | 0.011 | 0.011 | 0.012 | 0.011 | 0.012 | 0.011 | 0.01 |
| Ozone | 2nd highest daily max | ns | 2 | 0.105 | 0.092 | 0.098 | 0.092 | 0.101 | 0.103 | 0.107 | 0.088 | 0.098 |
| | 4th highest daily max 8-h average | ns | 2 | 0.081 | 0.072 | 0.072 | 0.069 | 0.073 | 0.083 | 0.077 | 0.074 | 0.067 |
| PM ₁₀ * | 90th percentile | ns | 3 | 39 | 33.667 | 35.667 | 41.667 | 32 | 35.667 | 32.667 | 33.667 | 38 |
| | Weighted annual mean | down | 3 | 27.533 | 25.067 | 26.067 | 26.767 | 23.467 | 26 | 23.067 | 23.967 | 24.133 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 21.75 | 22.65 | 19.45 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 10.33 | 10.075 | 8.97 |
| MIDDLESEX-SOMERSET-HUNTERDON, NJ PMS | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.7 | 4.3 | 5.4 | 3.3 | 3.8 | 3 | 3.2 | 3.2 | 3.3 |
| SO ₂ | 2nd daily max | ns | 1 | 0.018 | 0.028 | 0.018 | 0.024 | 0.019 | 0.018 | 0.016 | 0.018 | 0.016 |
| | Annual mean | ns | 1 | 0.005 | 0.005 | 0.004 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 |
| NO ₂ | Annual mean | ns | 1 | 0.019 | 0.019 | 0.019 | 0.02 | 0.018 | 0.019 | 0.019 | 0.019 | 0.016 |
| Ozone | 2nd highest daily max | ns | 2 | 0.088 | 0.085 | 0.133 | 0.117 | 0.13 | 0.118 | 0.144 | 0.111 | 0.132 |
| | 4th highest daily max 8-h average | ns | 2 | 0.069 | 0.065 | 0.106 | 0.092 | 0.105 | 0.098 | 0.11 | 0.093 | 0.103 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.4 | 34.5 | 34.1 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 11.49 | 13.14 | 13.23 |
| | | | | | | | | | | | | 11.13 |
| MILWAUKEE-WAUKESHA, WI | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 2.9 | 3 | 2.4 | 1.9 | 1.8 | 1.9 | 1.9 | 1.5 | 1.5 |
| SO ₂ | 2nd daily max | ns | 1 | 0.018 | 0.032 | 0.025 | 0.028 | 0.028 | 0.022 | 0.024 | 0.026 | 0.018 |
| | Annual mean | ns | 1 | 0.003 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 |
| NO ₂ | Annual mean | down | 1 | 0.017 | 0.017 | 0.017 | 0.017 | 0.016 | 0.016 | 0.016 | 0.016 | 0.016 |
| Ozone | 2nd highest daily max | ns | 2 | 0.103 | 0.133 | 0.123 | 0.112 | 0.118 | 0.118 | 0.116 | 0.096 | 0.113 |
| | 4th highest daily max 8-h average | ns | 2 | 0.082 | 0.087 | 0.103 | 0.086 | 0.083 | 0.084 | 0.091 | 0.08 | 0.093 |
| PM ₁₀ * | 90th percentile | ns | 2 | 44 | 37.5 | 51 | 34.5 | 33.5 | 37.5 | 36 | 32.5 | 33.5 |
| | Weighted annual mean | ns | 2 | 23.95 | 24.25 | 25.65 | 23.35 | 22.1 | 24.65 | 22.3 | 20.55 | 22.05 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 37.733 | 31.233 | 37.3 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 14.427 | 13.253 | 13.67 |
| | | | | | | | | | | | | 12.873 |
| MINNEAPOLIS-ST. PAUL, MN-WI | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 3 | 3.933 | 4.833 | 3.867 | 3.067 | 3.233 | 4 | 3.033 | 3.067 | 3 |
| SO ₂ | 2nd daily max | ns | 2 | 0.021 | 0.025 | 0.018 | 0.019 | 0.024 | 0.019 | 0.022 | 0.02 | 0.015 |
| | Annual mean | down | 2 | 0.003 | 0.004 | 0.003 | 0.003 | 0.004 | 0.003 | 0.003 | 0.003 | 0.002 |
| NO ₂ | Annual mean | down | 1 | 0.019 | 0.019 | 0.019 | 0.015 | 0.014 | 0.013 | 0.014 | 0.012 | 0.01 |
| Ozone | 2nd highest daily max | ns | 2 | 0.074 | 0.081 | 0.101 | 0.092 | 0.088 | 0.092 | 0.085 | 0.088 | 0.097 |
| | 4th highest daily max 8-h average | ns | 2 | 0.058 | 0.069 | 0.077 | 0.071 | 0.076 | 0.071 | 0.074 | 0.068 | 0.074 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 42.7 | 34.7 |
| | Weighted annual mean | NA | 1 | ND | 13.12 | 13.02 |
| | | | | | | | | | | | | 11.33 |
| MISSOULA, MT | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | down | 1 | 76 | 63 | 45 | 45 | 40 | 37 | 29 | 30 | 34 |
| | Weighted annual mean | down | 1 | 45 | 33 | 24.2 | 24 | 21.3 | 20.2 | 17.7 | 18.3 | 16.4 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 29.3 | 33.8 | 43.7 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 9.83 | 12.41 | 10.43 |
| | | | | | | | | | | | | 8.47 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|---|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| PITTSBURGH, PA | | | | | | | | | | | | | |
| CO | Maximum quarterly value | ns | 1 | 0.134 | 0.171 | 0.115 | 0.058 | 0.075 | 0.061 | 0.081 | 0.07 | 0.057 | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.4 | 7 | 5.9 | 4.3 | 3.8 | 3.8 | 3.9 | 3.2 | 3.4 | |
| SO ₂ | 2nd daily max | down | 2 | 0.077 | 0.087 | 0.073 | 0.053 | 0.068 | 0.073 | 0.065 | 0.064 | 0.063 | |
| NO ₂ | Annual mean | down | 2 | 0.016 | 0.016 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.011 | 0.012 | |
| Ozone | Annual mean | down | 1 | 0.024 | 0.027 | 0.023 | 0.024 | 0.022 | 0.026 | 0.024 | 0.022 | 0.021 | |
| Ozone | 2nd highest daily max | ns | 3 | 0.116 | 0.114 | 0.124 | 0.107 | 0.114 | 0.114 | 0.128 | 0.098 | 0.105 | |
| Ozone | 4th highest daily max 8-h average | ns | 3 | 0.094 | 0.097 | 0.104 | 0.09 | 0.094 | 0.095 | 0.096 | 0.082 | 0.089 | |
| PM ₁₀ * | 90th percentile | down | 2 | 79 | 82 | 71 | 68 | 67.5 | 70 | 61.5 | 65.5 | 67 | |
| PM ₁₀ * | Weighted annual mean | down | 2 | 38.45 | 43.3 | 37.1 | 35.55 | 34.3 | 35.75 | 32.2 | 34.05 | 35.85 | 31.6 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 49.3 | 49.15 | 52.8 | |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 18.8 | 18.275 | 19.815 | |
| PITTSFIELD, MA | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.112 | 0.085 | 0.086 | 0.108 | 0.087 | 0.078 | 0.092 | 0.088 | 0.112 | |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.083 | 0.074 | 0.072 | 0.081 | 0.078 | 0.069 | 0.075 | 0.072 | 0.092 | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 47.7 | 28.8 | 33.8 | |
| PM _{2.5} * | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.78 | 11.8 | 13.35 | |
| POCATELLO, ID | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.037 | 0.037 | 0.037 | 0.03 | 0.034 | 0.034 | 0.046 | 0.036 | 0.037 | |
| SO ₂ | Annual mean | ns | 1 | 0.007 | 0.007 | 0.007 | 0.006 | 0.005 | 0.006 | 0.007 | 0.008 | 0.007 | |
| PM ₁₀ * | 90th percentile | ns | 1 | 56 | 50 | 40 | 46 | 39 | 37 | 48 | 45 | 48 | |
| PM ₁₀ * | Weighted annual mean | ns | 1 | 39.4 | 30.5 | 23.2 | 24.4 | 22.9 | 22.4 | 25.3 | 24.9 | 26 | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 72.25 | 51.1 | 36.2 | |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 9.64 | 10.46 | 9.32 | |
| PONCE, PR | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 17.35 | 17.95 | 14.25 | |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 8.19 | 7.27 | 7.24 | |
| PORTLAND, ME | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.112 | 0.122 | 0.116 | 0.1 | 0.13 | 0.12 | 0.105 | 0.077 | 0.116 | |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.089 | 0.088 | 0.096 | 0.083 | 0.103 | 0.089 | 0.076 | 0.067 | 0.097 | |
| PM ₁₀ * | 90th percentile | ns | 1 | 51 | 46 | 69 | 43 | 51 | 46 | 33 | 46 | 46 | |
| PM ₁₀ * | Weighted annual mean | down | 1 | 29 | 26.5 | 34.3 | 27.1 | 29.3 | 26.7 | 21.4 | 23.7 | 25.6 | |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 34.2 | 27.1 | 30.5 | |
| PM _{2.5} * | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 10.01 | 9.565 | 10.28 | |
| PORTLAND-VANCOUVER, OR-WA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 6.8 | 7.8 | 6.3 | 6.4 | 6 | 5.5 | 6.7 | 6.2 | 4.7 | |
| Ozone | 2nd highest daily max | ns | 1 | 0.082 | 0.106 | 0.092 | 0.124 | 0.079 | 0.136 | 0.094 | 0.082 | 0.093 | |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.062 | 0.078 | 0.073 | 0.099 | 0.062 | 0.081 | 0.072 | 0.065 | 0.069 | |
| PM ₁₀ * | 90th percentile | down | 3 | 47.667 | 41.333 | 35 | 33 | 34.333 | 31.667 | 31.333 | 31.667 | 27.667 | |
| PM ₁₀ * | Weighted annual mean | down | 3 | 26.867 | 25.2 | 21.433 | 21.267 | 22.667 | 20.533 | 19.3 | 18.667 | 17.1 | |
| PM _{2.5} * | 98th percentile | NA | 4 | ND | ND | ND | ND | ND | ND | 30.55 | 32.325 | 27.325 | |
| PM _{2.5} * | Weighted annual mean | NA | 4 | ND | ND | ND | ND | ND | ND | 9.115 | 10.028 | 8.998 | |
| PORTSMOUTH-ROCHESTER, NH-ME | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.019 | 0.022 | 0.017 | 0.015 | 0.018 | 0.016 | 0.019 | 0.013 | 0.013 | |
| SO ₂ | Annual mean | down | 1 | 0.006 | 0.006 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 | |
| NO ₂ | Annual mean | down | 1 | 0.014 | 0.013 | 0.012 | 0.013 | 0.013 | 0.012 | 0.01 | 0.011 | 0.011 | |
| Ozone | 2nd highest daily max | ns | 2 | 0.117 | 0.118 | 0.122 | 0.097 | 0.121 | 0.11 | 0.107 | 0.087 | 0.102 | |
| Ozone | 4th highest daily max 8-h average | ns | 2 | 0.085 | 0.087 | 0.087 | 0.079 | 0.091 | 0.087 | 0.087 | 0.069 | 0.079 | |
| PM ₁₀ * | 90th percentile | down | 1 | 31 | 29 | 27 | 30 | 29 | 27 | 30 | 26 | 26 | |
| PM ₁₀ * | Weighted annual mean | down | 1 | 19 | 15.3 | 15.3 | 17.8 | 17.9 | 16.4 | 16.2 | 14.5 | 14.5 | |
| PROVIDENCE-FALL RIVER-WARWICK, RI-MA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.4 | 6.7 | 7 | 4.4 | 5.6 | 4.7 | 3.9 | 3.5 | 3.8 | |
| SO ₂ | 2nd daily max | ns | 3 | 0.034 | 0.035 | 0.024 | 0.03 | 0.031 | 0.025 | 0.024 | 0.031 | 0.028 | |
| SO ₂ | Annual mean | down | 3 | 0.008 | 0.008 | 0.006 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.005 | |
| NO ₂ | Annual mean | ns | 1 | 0.022 | 0.022 | 0.022 | 0.025 | 0.025 | 0.025 | 0.024 | 0.02 | 0.018 | |
| Ozone | 2nd highest daily max | ns | 1 | 0.12 | 0.12 | 0.131 | 0.112 | 0.108 | 0.098 | 0.108 | 0.115 | 0.128 | |
| Ozone | 4th highest daily max 8-h average | ns | 1 | 0.089 | 0.089 | 0.096 | 0.083 | 0.084 | 0.077 | 0.08 | 0.08 | 0.092 | |
| PM ₁₀ * | 90th percentile | down | 1 | 46 | 46 | 36 | 40 | 35 | 32 | 35 | 31 | 38 | |
| PM ₁₀ * | Weighted annual mean | down | 1 | 28.6 | 28.6 | 21.5 | 24.5 | 24.1 | 22.5 | 23.1 | 21.3 | 21.7 | |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 36 | 28.867 | 33.267 | |
| PM _{2.5} * | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 11.75 | 10.99 | 12.383 | |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------------------------------|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PROVO-OREM, UT | | | | | | | | | | | | |
| NO ₂ | Annual mean | ns | 1 | 0.026 | 0.024 | 0.023 | 0.024 | 0.023 | 0.024 | 0.024 | 0.024 | 0.025 |
| Ozone | 2nd highest daily max | ns | 1 | 0.084 | 0.084 | 0.083 | 0.097 | 0.08 | 0.102 | 0.096 | 0.085 | 0.086 |
| | 4th highest daily max 8-h average | ns | 1 | 0.068 | 0.069 | 0.068 | 0.078 | 0.07 | 0.083 | 0.073 | 0.071 | 0.067 |
| PM ₁₀ * | 90th percentile | ns | 2 | 71.5 | 55 | 48.5 | 56.5 | 49.5 | 44 | 51.5 | 52 | 53 |
| | Weighted annual mean | ns | 2 | 37.5 | 34.25 | 28.8 | 33.7 | 30 | 26.25 | 29.6 | 29.1 | 31.4 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 31.15 | 33.75 | 55.15 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 9.355 | 9.925 | 41.4 |
| PUEBLO, CO | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 19.9 | 19.4 | 16.9 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 7.81 | 8.52 | 7.76 |
| RACINE, WI | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.1 | 4.3 | 4.3 | 3 | 3.1 | 3 | 2.7 | 2.3 | 2.1 |
| Ozone | 2nd highest daily max | ns | 1 | 0.103 | 0.114 | 0.113 | 0.129 | 0.117 | 0.124 | 0.114 | 0.096 | 0.115 |
| | 4th highest daily max 8-h average | ns | 1 | 0.08 | 0.088 | 0.096 | 0.083 | 0.098 | 0.084 | 0.093 | 0.078 | 0.092 |
| RALEIGH-DURHAM-CHAPEL HILL, NC | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 4 | 0.103 | 0.101 | 0.102 | 0.095 | 0.106 | 0.115 | 0.122 | 0.11 | 0.103 |
| | 4th highest daily max 8-h average | ns | 4 | 0.085 | 0.081 | 0.084 | 0.08 | 0.09 | 0.095 | 0.097 | 0.086 | 0.085 |
| PM ₁₀ * | 90th percentile | ns | 2 | 39 | 31 | 33.5 | 39 | 39.5 | 40 | 36.5 | 35.5 | 37 |
| | Weighted annual mean | ns | 2 | 24.75 | 21.8 | 23.3 | 25.1 | 24.6 | 24.4 | 22.15 | 23.05 | 23.15 |
| PM _{2.5} * | 98th percentile | NA | 4 | ND | ND | ND | ND | ND | ND | 35.375 | 31.125 | 30.85 |
| | Weighted annual mean | NA | 4 | ND | ND | ND | ND | ND | ND | 15.258 | 14.843 | 30.025 |
| RAPID CITY, SD | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 25 | 23.133 | 19.533 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 9.09 | 7.833 | 7.917 |
| READING, PA | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 1 | 0.027 | 0.037 | 0.032 | 0.037 | 0.028 | 0.022 | 0.027 | 0.028 | 0.025 |
| | Annual mean | down | 1 | 0.009 | 0.01 | 0.009 | 0.009 | 0.008 | 0.009 | 0.008 | 0.008 | 0.007 |
| NO ₂ | Annual mean | down | 1 | 0.021 | 0.023 | 0.021 | 0.022 | 0.021 | 0.021 | 0.021 | 0.02 | 0.019 |
| Ozone | 2nd highest daily max | ns | 2 | 0.108 | 0.104 | 0.112 | 0.105 | 0.115 | 0.105 | 0.126 | 0.103 | 0.122 |
| | 4th highest daily max 8-h average | ns | 2 | 0.088 | 0.084 | 0.093 | 0.086 | 0.092 | 0.091 | 0.101 | 0.08 | 0.095 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 35.7 | 37.5 | 43 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 13.51 | 16.87 | 48.5 |
| REDDING, CA | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 47 | 47 | 47 | 39 | 37 | 46 | 40 | 37 | 41 |
| | Weighted annual mean | ns | 1 | 29.9 | 29.9 | 25.2 | 24.1 | 22.2 | 23.4 | 28.5 | 23.6 | 23.6 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 55 | 42 | 38 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 11.53 | 10.355 | 10.68 |
| RENO, NV | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 3 | 6.067 | 7.633 | 5.533 | 6.467 | 6.533 | 6.033 | 7 | 4.633 | 4.5 |
| Ozone | 2nd highest daily max | ns | 2 | 0.087 | 0.088 | 0.083 | 0.096 | 0.084 | 0.093 | 0.094 | 0.083 | 0.087 |
| | 4th highest daily max 8-h average | ns | 2 | 0.063 | 0.07 | 0.069 | 0.074 | 0.068 | 0.075 | 0.075 | 0.067 | 0.076 |
| PM ₁₀ * | 90th percentile | ns | 3 | 81.333 | 74 | 58 | 61 | 67 | 64.333 | 62 | 64.333 | 64.667 |
| | Weighted annual mean | down | 3 | 45.767 | 41.767 | 36.567 | 34.167 | 37.133 | 35.467 | 40.233 | 33.4 | 34.367 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 32.8 | 31.4 | 36.4 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 9.93 | 8.92 | 25.9 |
| RICHLAND-KENNEWICK-PASCO, WA | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | up | 1 | 27 | 27 | 34 | 38 | 33 | 30 | 42 | 40 | 38 |
| | Weighted annual mean | up | 1 | 15.1 | 15.1 | 17.8 | 20.3 | 19.4 | 19.9 | 20.8 | 24 | 22 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.2 | 18.2 | 22.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 8.4 | 6.76 | 9.12 |
| RICHMOND-PETERSBURG, VA | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3 | 2.7 | 2.3 | 2.5 | 2.5 | 1.7 | 1.9 | 2 | 2.3 |
| SO ₂ | 2nd daily max | down | 1 | 0.032 | 0.024 | 0.023 | 0.022 | 0.017 | 0.019 | 0.017 | 0.017 | 0.019 |
| | Annual mean | down | 1 | 0.007 | 0.006 | 0.005 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 | 0.005 |
| NO ₂ | Annual mean | ns | 1 | 0.01 | 0.012 | 0.011 | 0.01 | 0.012 | 0.012 | 0.011 | 0.011 | 0.012 |
| Ozone | 2nd highest daily max | ns | 1 | 0.132 | 0.101 | 0.106 | 0.104 | 0.123 | 0.116 | 0.133 | 0.094 | 0.119 |
| | 4th highest daily max 8-h average | ns | 1 | 0.1 | 0.082 | 0.088 | 0.084 | 0.1 | 0.092 | 0.097 | 0.076 | 0.089 |
| PM ₁₀ * | 90th percentile | down | 1 | 45 | 36 | 43 | 44 | 39 | 39 | 28 | 38 | 29 |
| | Weighted annual mean | down | 1 | 24.2 | 22.1 | 24.3 | 23.8 | 22.7 | 23.4 | 18.6 | 22.2 | 20.4 |
| PM _{2.5} * | 98th percentile | NA | 4 | ND | ND | ND | ND | ND | ND | 35.467 | 32.875 | 33.1 |
| | Weighted annual mean | NA | 4 | ND | ND | ND | ND | ND | ND | 14.117 | 14.515 | 30.35 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|-------------------------------|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| RIVERSIDE-SAN BERNARDINO, CA | | | | | | | | | | | | | |
| CO | Maximum quarterly value | ns | 1 | 0.036 | 0.026 | 0.033 | 0.031 | 0.045 | 0.046 | 0.038 | 0.032 | 0.029 | 0.027 |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 2 | 5.55 | 5.8 | 5.5 | 4.8 | 4.95 | 4.4 | 4 | 4 | 3.45 | 3.25 |
| NO ₂ | Annual mean | down | 2 | 0.036 | 0.036 | 0.038 | 0.033 | 0.03 | 0.029 | 0.032 | 0.03 | 0.031 | 0.03 |
| Ozone | 2nd highest daily max | down | 3 | 0.223 | 0.218 | 0.216 | 0.195 | 0.163 | 0.205 | 0.143 | 0.16 | 0.158 | 0.148 |
| | 4th highest daily max 8-h average | down | 3 | 0.162 | 0.153 | 0.151 | 0.138 | 0.118 | 0.152 | 0.112 | 0.115 | 0.121 | 0.115 |
| PM ₁₀ * | 90th percentile | down | 2 | 81.5 | 71.5 | 77 | 67 | 68.5 | 66 | 73 | 64.5 | 71.5 | 66 |
| | Weighted annual mean | ns | 2 | 51.35 | 45.8 | 44.45 | 43.3 | 43.35 | 41.65 | 49.55 | 41.6 | 46.2 | 44.3 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 70.15 | 55.633 | 53.7 | 53.333 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 28.875 | 21.85 | 23.547 | 22.79 |
| ROANOKE, VA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.5 | 5.7 | 5.2 | 5.9 | 4.3 | 3.9 | 3.7 | 3.1 | 3.4 | 3 |
| SO ₂ | 2nd daily max | ns | 1 | 0.018 | 0.011 | 0.01 | 0.014 | 0.013 | 0.009 | 0.01 | 0.014 | 0.009 | 0.009 |
| | Annual mean | down | 1 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| NO ₂ | Annual mean | ns | 1 | 0.015 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.012 | 0.011 | 0.014 | 0.013 |
| Ozone | 2nd highest daily max | ns | 1 | 0.103 | 0.102 | 0.093 | 0.084 | 0.102 | 0.126 | 0.105 | 0.095 | 0.101 | 0.107 |
| | 4th highest daily max 8-h average | ns | 1 | 0.084 | 0.084 | 0.079 | 0.073 | 0.084 | 0.099 | 0.089 | 0.081 | 0.089 | 0.091 |
| PM ₁₀ * | 90th percentile | down | 1 | 63 | 63 | 64 | 71 | 64 | 54 | 54 | 57 | 42 | 47 |
| | Weighted annual mean | down | 1 | 40 | 40 | 40.3 | 37.9 | 34.6 | 33.3 | 34.7 | 31.5 | 26.6 | 28.2 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.8 | 35.5 | 34.2 | 36 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 13.82 | 15.52 | 15.1 | 15.09 |
| ROCHESTER, NY | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 2 | 3.15 | 4.5 | 3.15 | 3.7 | 1.9 | 2.7 | 2.5 | 2.2 | 1.75 | 2.1 |
| SO ₂ | 2nd daily max | down | 2 | 0.041 | 0.043 | 0.038 | 0.033 | 0.038 | 0.053 | 0.03 | 0.021 | 0.025 | 0.016 |
| | Annual mean | down | 2 | 0.01 | 0.011 | 0.01 | 0.009 | 0.009 | 0.009 | 0.006 | 0.006 | 0.007 | 0.005 |
| Ozone | 2nd highest daily max | ns | 1 | 0.092 | 0.099 | 0.103 | 0.083 | 0.097 | 0.088 | 0.096 | 0.08 | 0.099 | 0.114 |
| | 4th highest daily max 8-h average | ns | 1 | 0.074 | 0.079 | 0.09 | 0.068 | 0.085 | 0.077 | 0.088 | 0.073 | 0.084 | 0.098 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 28.4 | 37.5 | 31.9 |
| | Weighted annual mean | NA | 1 | ND | 11.76 | 11.66 | 11.22 |
| ROCKFORD, IL | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4 | 4 | 4.5 | 3.2 | 3.7 | 3.6 | 3.8 | 2.9 | 2.9 | 2.4 |
| Ozone | 2nd highest daily max | ns | 1 | 0.079 | 0.101 | 0.104 | 0.089 | 0.08 | 0.085 | 0.093 | 0.084 | 0.086 | 0.091 |
| | 4th highest daily max 8-h average | ns | 1 | 0.062 | 0.079 | 0.084 | 0.077 | 0.071 | 0.073 | 0.082 | 0.069 | 0.078 | 0.079 |
| ROCKY MOUNT, NC | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.11 | 0.104 | 0.097 | 0.091 | 0.106 | 0.107 | 0.104 | 0.106 | 0.099 | 0.109 |
| | 4th highest daily max 8-h average | ns | 1 | 0.092 | 0.088 | 0.084 | 0.08 | 0.089 | 0.09 | 0.092 | 0.085 | 0.085 | 0.095 |
| SACRAMENTO, CA | | | | | | | | | | | | | |
| CO | Maximum quarterly value | down | 1 | 0.01 | 0.007 | 0.005 | 0.006 | 0.005 | 0.046 | 0.005 | 0.005 | 0.005 | 0.005 |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 3 | 6.5 | 6.633 | 5 | 5 | 4.8 | 4.933 | 4.9 | 3.767 | 4.167 | 3.3 |
| SO ₂ | 2nd daily max | up | 2 | 0.004 | 0.005 | 0.005 | 0.004 | 0.005 | 0.01 | 0.008 | 0.01 | 0.01 | 0.007 |
| | Annual mean | up | 2 | 0.001 | 0.001 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.002 | 0.002 |
| NO ₂ | Annual mean | ns | 3 | 0.018 | 0.016 | 0.017 | 0.017 | 0.015 | 0.016 | 0.017 | 0.016 | 0.016 | 0.016 |
| Ozone | 2nd highest daily max | ns | 3 | 0.117 | 0.105 | 0.131 | 0.12 | 0.095 | 0.14 | 0.113 | 0.113 | 0.113 | 0.117 |
| | 4th highest daily max 8-h average | ns | 3 | 0.085 | 0.086 | 0.093 | 0.093 | 0.078 | 0.093 | 0.088 | 0.086 | 0.087 | 0.094 |
| PM ₁₀ * | 90th percentile | ns | 3 | 57.667 | 44.333 | 53.333 | 39.667 | 37 | 45 | 54.333 | 43 | 46.667 | 43 |
| | Weighted annual mean | ns | 3 | 30.6 | 28.367 | 26.7 | 24.2 | 23.033 | 23.833 | 29.333 | 24.733 | 27.167 | 26.767 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 67 | 49 | 53 | 63 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 16.58 | 12.37 | 11.63 | 14.33 |
| ST. CLOUD, MN | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5 | 6.4 | 4.4 | 4 | 4 | 3.8 | 3.3 | 2.7 | 2.6 | 2.9 |
| ST. JOSEPH, MO | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 28.2 | 26.8 | 29 | 30.9 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.48 | 11.89 | 12.9 | 13 |
| ST. LOUIS, MO-IL | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 3.6 | 3.8 | 3.2 | 3.9 | 3.7 | 4 | 2.3 | 2.2 | 2.6 | 6.9 |
| SO ₂ | 2nd daily max | ns | 3 | 0.048 | 0.051 | 0.047 | 0.059 | 0.042 | 0.042 | 0.042 | 0.038 | 0.043 | 0.045 |
| | Annual mean | down | 3 | 0.011 | 0.012 | 0.01 | 0.011 | 0.009 | 0.009 | 0.009 | 0.007 | 0.006 | 0.006 |
| NO ₂ | Annual mean | ns | 1 | 0.024 | 0.028 | 0.026 | 0.025 | 0.025 | 0.026 | 0.027 | 0.026 | 0.025 | 0.023 |
| Ozone | 2nd highest daily max | ns | 3 | 0.118 | 0.126 | 0.124 | 0.111 | 0.106 | 0.115 | 0.126 | 0.108 | 0.103 | 0.118 |
| | 4th highest daily max 8-h average | ns | 3 | 0.085 | 0.095 | 0.095 | 0.089 | 0.083 | 0.091 | 0.1 | 0.083 | 0.086 | 0.097 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 35.85 | 33.3 | 33.55 | 44.7 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 16.165 | 16.295 | 15.895 | 16.38 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|---|-------------------------------------|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SAN LUIS OBISPO-ATASCADERO-PASO ROBLES | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.1 | 3.1 | 2.4 | 2.3 | 2.3 | 2 | 2.9 | 2.2 | 1.7 | 1.6 |
| SO ₂ | 2nd daily max | ns | 1 | 0.028 | 0.028 | 0.028 | 0.029 | 0.026 | 0.03 | 0.027 | 0.028 | 0.028 | 0.021 |
| | Annual mean | down | 1 | 0.006 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 |
| NO ₂ | Annual mean | down | 2 | 0.014 | 0.014 | 0.012 | 0.012 | 0.012 | 0.012 | 0.013 | 0.012 | 0.011 | 0.01 |
| Ozone | 2nd highest daily max | ns | 3 | 0.088 | 0.087 | 0.091 | 0.1 | 0.079 | 0.093 | 0.085 | 0.078 | 0.085 | 0.083 |
| | 4th highest daily max 8-h average | ns | 3 | 0.067 | 0.07 | 0.071 | 0.079 | 0.066 | 0.076 | 0.069 | 0.065 | 0.068 | 0.07 |
| PM ₁₀ * | 90th percentile | ns | 2 | 45.5 | 37 | 39 | 31.5 | 29 | 28 | 34 | 36.5 | 30.5 | 30.5 |
| | Weighted annual mean | down | 2 | 23.2 | 21.15 | 22.25 | 19.4 | 20.75 | 17.35 | 20.75 | 19.95 | 19.65 | 19.8 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 26.9 | 41 | 50.7 | 25.7 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 9.32 | 10.31 | 10.12 | 9.23 |
| SANTA BARBARA-SANTA MARIA-LOMPOC, CA M | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 3 | 1.867 | 1.933 | 1.333 | 1.267 | 1.267 | 1.267 | 1.267 | 1.2 | 1.333 | 1.1 |
| SO ₂ | 2nd daily max | down | 4 | 0.004 | 0.004 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| | Annual mean | ns | 4 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| NO ₂ | Annual mean | down | 5 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.006 | 0.007 | 0.007 | 0.006 | 0.006 |
| Ozone | 2nd highest daily max | down | 5 | 0.103 | 0.101 | 0.118 | 0.114 | 0.089 | 0.093 | 0.083 | 0.088 | 0.085 | 0.082 |
| | 4th highest daily max 8-h average | down | 5 | 0.079 | 0.077 | 0.081 | 0.084 | 0.073 | 0.07 | 0.068 | 0.069 | 0.07 | 0.067 |
| PM ₁₀ * | 90th percentile | ns | 3 | 35.333 | 33 | 28.667 | 29.667 | 31.333 | 29.667 | 29.667 | 33.333 | 28.667 | 29 |
| | Weighted annual mean | ns | 3 | 21.1 | 20.733 | 18.4 | 17.267 | 20.067 | 17.633 | 18.9 | 20.433 | 18.067 | 17.933 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 19.3 | 23.4 | 19.4 |
| | Weighted annual mean | NA | 1 | ND | 9.77 | 10.4 | 9.52 |
| SANTA CRUZ-WATSONVILLE, CA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 1 | 1.2 | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.9 | 0.8 |
| SO ₂ | 2nd daily max | ns | 1 | 0.006 | 0.006 | 0.008 | 0.003 | 0.002 | 0.003 | 0.002 | 0.003 | 0.006 | 0.007 |
| | Annual mean | ns | 1 | 0.002 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| NO ₂ | Annual mean | down | 1 | 0.006 | 0.006 | 0.005 | 0.005 | 0.004 | 0.004 | 0.005 | 0.005 | 0.005 | 0.005 |
| Ozone | 2nd highest daily max | ns | 2 | 0.075 | 0.074 | 0.073 | 0.086 | 0.071 | 0.074 | 0.078 | 0.074 | 0.075 | 0.074 |
| | 4th highest daily max 8-h average | ns | 2 | 0.06 | 0.056 | 0.058 | 0.062 | 0.057 | 0.059 | 0.064 | 0.057 | 0.059 | 0.058 |
| PM ₁₀ * | 90th percentile | ns | 1 | 49 | 49 | 65 | 61 | 65 | 47 | 53 | 41 | 50 | 45 |
| | Weighted annual mean | ns | 1 | 31.1 | 31.1 | 36.4 | 32.8 | 36.9 | 28.5 | 30.9 | 26.2 | 28.7 | 26.8 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 21.9 | 17.9 | 23.1 | 22 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 9.2 | 7.93 | 9.13 | 8.6 |
| SANTA FE, NM | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.4 | 2.7 | 2.3 | 2.2 | 2.1 | 2 | 1.7 | 1.7 | 2.1 | 1.5 |
| PM ₁₀ * | 90th percentile | ns | 2 | 21.5 | 21 | 17.5 | 20 | 19 | 20 | 18.5 | 19.5 | 17 | 21 |
| | Weighted annual mean | ns | 2 | 14.4 | 13.25 | 12.25 | 13.45 | 13 | 13.6 | 12.95 | 12.05 | 12.15 | 13.75 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 11 | 9.5 | 10.1 | 13.9 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 4.89 | 4.9 | 4.73 | 4.94 |
| SANTA ROSA, CA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.8 | 3.2 | 2.4 | 3 | 3.1 | 3 | 3.3 | 2.7 | 2.3 | 2 |
| NO ₂ | Annual mean | down | 1 | 0.016 | 0.015 | 0.015 | 0.014 | 0.013 | 0.015 | 0.014 | 0.013 | 0.013 | 0.013 |
| Ozone | 2nd highest daily max | ns | 2 | 0.085 | 0.085 | 0.089 | 0.08 | 0.089 | 0.084 | 0.096 | 0.07 | 0.083 | 0.075 |
| | 4th highest daily max 8-h average | ns | 2 | 0.061 | 0.06 | 0.065 | 0.062 | 0.064 | 0.063 | 0.073 | 0.056 | 0.059 | 0.058 |
| PM ₁₀ * | 90th percentile | ns | 3 | 33 | 28.667 | 25.333 | 26 | 23.667 | 24.667 | 32.333 | 27 | 28.333 | 24.667 |
| | Weighted annual mean | ns | 3 | 19.133 | 18.1 | 15.033 | 15.633 | 15.567 | 14.7 | 18.567 | 14.8 | 16.833 | 15.867 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 44.5 | 36.8 | 41.4 | 42.4 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.11 | 10.31 | 10.8 | 10.54 |
| SARASOTA-BRADENTON, FL | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 6.5 | 5.3 | 5.9 | 5.1 | 5.3 | 5.6 | 4.95 | 4.3 | 3.4 | 3.4 |
| SO ₂ | 2nd daily max | ns | 1 | 0.012 | 0.012 | 0.012 | 0.015 | 0.012 | 0.014 | 0.011 | 0.019 | 0.013 | 0.013 |
| | Annual mean | ns | 1 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 |
| Ozone | 2nd highest daily max | ns | 2 | 0.102 | 0.095 | 0.097 | 0.094 | 0.104 | 0.12 | 0.111 | 0.106 | 0.109 | 0.088 |
| | 4th highest daily max 8-h average | ns | 2 | 0.078 | 0.079 | 0.076 | 0.075 | 0.08 | 0.089 | 0.084 | 0.084 | 0.084 | 0.072 |
| PM ₁₀ * | 90th percentile | ns | 2 | 37 | 34.5 | 30.5 | 27 | 32 | 33 | 34 | 33 | 30.5 | 29 |
| | Weighted annual mean | ns | 2 | 25.25 | 21.5 | 19.75 | 19.05 | 21.1 | 21.25 | 21.55 | 22.2 | 21.6 | 18.2 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 30.75 | 26.9 | 28.6 | 21.7 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 11.095 | 10.64 | 10.205 | 8.885 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|--------|---------------|
| SAVANNAH, GA | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.023 | 0.023 | 0.023 | 0.03 | 0.024 | 0.027 | 0.018 | 0.024 | 0.02 0.022 |
| | Annual mean | down | 1 | 0.006 | 0.006 | 0.006 | 0.005 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 0.003 |
| Ozone | 2nd highest daily max | ns | 1 | 0.089 | 0.089 | 0.089 | 0.085 | 0.08 | 0.097 | 0.107 | 0.102 | 0.085 0.083 |
| | 4th highest daily max 8-h average | ns | 1 | 0.073 | 0.073 | 0.073 | 0.072 | 0.071 | 0.075 | 0.083 | 0.079 | 0.067 0.065 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 32.1 | 30.5 27.3 |
| | Weighted annual mean | NA | 1 | ND | 15.38 | 14.71 13.09 |
| SCRANTON-WILKES-BARRE-HAZLETON, PA | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 2 | 2.9 | 3.55 | 2.8 | 3.8 | 3.05 | 2.5 | 2.15 | 2.15 | 2.05 2.1 |
| SO ₂ | 2nd daily max | ns | 2 | 0.026 | 0.035 | 0.036 | 0.028 | 0.029 | 0.024 | 0.022 | 0.024 | 0.029 0.024 |
| | Annual mean | ns | 2 | 0.007 | 0.007 | 0.005 | 0.006 | 0.007 | 0.005 | 0.006 | 0.005 | 0.006 0.006 |
| NO ₂ | Annual mean | down | 2 | 0.018 | 0.018 | 0.016 | 0.018 | 0.016 | 0.015 | 0.015 | 0.014 | 0.015 0.014 |
| Ozone | 2nd highest daily max | ns | 3 | 0.111 | 0.103 | 0.107 | 0.109 | 0.104 | 0.105 | 0.111 | 0.086 | 0.099 0.121 |
| | 4th highest daily max 8-h average | ns | 3 | 0.091 | 0.086 | 0.09 | 0.083 | 0.089 | 0.088 | 0.094 | 0.074 | 0.087 0.092 |
| PM ₁₀ * | 90th percentile | down | 1 | 35 | 35 | 42 | 36 | 35 | 35 | 32.5 | 30 | 33 34 |
| | Weighted annual mean | ns | 1 | 16 | 16 | 23.3 | 21 | 20.3 | 20 | 18.6 | 17.2 | 19.5 18.4 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 31.25 | 32.2 | 37.05 35.45 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 11.77 | 12.16 | 13.22 12.22 |
| SEATTLE-BELLEVUE-EVERETT, WA | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 6.7 | 7 | 6.1 | 6.8 | 6.5 | 5.5 | 5.9 | 5.2 | 6.5 5 |
| NO ₂ | Annual mean | ns | 1 | 0.019 | 0.019 | 0.019 | 0.02 | 0.019 | 0.02 | 0.019 | 0.02 | 0.02 0.019 |
| Ozone | 2nd highest daily max | ns | 1 | 0.097 | 0.106 | 0.087 | 0.098 | 0.072 | 0.111 | 0.067 | 0.08 | 0.069 0.071 |
| | 4th highest daily max 8-h average | down | 1 | 0.06 | 0.06 | 0.062 | 0.073 | 0.058 | 0.063 | 0.054 | 0.056 | 0.051 0.054 |
| PM ₁₀ * | 90th percentile | down | 2 | 61.5 | 42.5 | 46 | 36 | 43.5 | 34.5 | 33.5 | 41 | 30.5 28.5 |
| | Weighted annual mean | down | 2 | 30.7 | 24.35 | 25.4 | 22.75 | 24.85 | 19.7 | 20.6 | 23.5 | 19.55 19.1 |
| PM _{2.5} * | 98th percentile | NA | 4 | ND | ND | ND | ND | ND | ND | 27.5 | 29.65 | 26.9 28.225 |
| | Weighted annual mean | NA | 4 | ND | ND | ND | ND | ND | ND | 9.233 | 10.023 | 9.208 9.15 |
| SHARON, PA | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.029 | 0.047 | 0.032 | 0.029 | 0.032 | 0.029 | 0.039 | 0.024 | 0.033 0.024 |
| | Annual mean | down | 1 | 0.008 | 0.008 | 0.008 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 0.006 |
| Ozone | 2nd highest daily max | ns | 1 | 0.105 | 0.111 | 0.113 | 0.103 | 0.111 | 0.121 | 0.108 | 0.098 | 0.113 0.118 |
| | 4th highest daily max 8-h average | ns | 1 | 0.083 | 0.09 | 0.095 | 0.09 | 0.092 | 0.106 | 0.091 | 0.081 | 0.094 0.103 |
| SHREVEPORT-BOSSIER CITY, LA | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.011 | 0.008 | 0.004 | 0.004 | 0.007 | 0.01 | 0.006 | 0.006 | 0.004 0.005 |
| | Annual mean | ns | 1 | 0.004 | 0.002 | 0.001 | 0.002 | 0.002 | 0.003 | 0.002 | 0.002 | 0.002 0.002 |
| Ozone | 2nd highest daily max | ns | 1 | 0.122 | 0.094 | 0.092 | 0.096 | 0.103 | 0.111 | 0.108 | 0.129 | 0.105 0.091 |
| | 4th highest daily max 8-h average | ns | 1 | 0.092 | 0.08 | 0.078 | 0.078 | 0.083 | 0.088 | 0.094 | 0.093 | 0.084 0.076 |
| PM ₁₀ * | 90th percentile | down | 1 | 45 | 41 | 41 | 31 | 37 | 37 | 37 | 37 | 34 35 |
| | Weighted annual mean | down | 1 | 25.3 | 25.5 | 24.1 | 22.1 | 23.3 | 22.85 | 22.4 | 23.9 | 21.7 21.3 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 30.9 | 30.7 | 28.1 31.8 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 14.16 | 13.77 | 13.15 12.37 |
| SIOUX CITY, IA-NE | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 40 | 42 | 55 | 72 | 53 | 45 | 48 | 43 | 51 46 |
| | Weighted annual mean | ns | 1 | 22.2 | 22.9 | 26 | 32.1 | 27.9 | 27.9 | 28 | 25.4 | 28.6 27.1 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 24.9 | 31.4 | 24.5 24.7 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 9.92 | 9.54 | 10.55 9.63 |
| SIOUX FALLS, SD | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | ns | 1 | 27 | 42 | 40 | 32 | 39 | 36 | 37 | 33 | 42 31 |
| | Weighted annual mean | ns | 1 | 18.2 | 23.5 | 23.1 | 22.2 | 22.6 | 22.2 | 22.1 | 19.8 | 24.3 20.8 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 32.6 | 28.35 | 21.15 22.3 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 12.21 | 9.305 | 10.08 9.09 |
| SOUTH BEND, IN | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 2 | 0.087 | 0.096 | 0.112 | 0.107 | 0.114 | 0.115 | 0.103 | 0.093 | 0.107 0.123 |
| | 4th highest daily max 8-h average | ns | 2 | 0.076 | 0.084 | 0.091 | 0.089 | 0.091 | 0.092 | 0.089 | 0.08 | 0.086 0.102 |
| PM ₁₀ * | 90th percentile | ns | 1 | 36 | 43 | 45 | 35 | 30 | 44 | 39 | 30 | 29 30 |
| | Weighted annual mean | down | 1 | 23.4 | 28.6 | 22.9 | 20.2 | 17 | 23.9 | 23.2 | 19.4 | 17.2 16.7 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | 33.3 | 37.2 32.05 |
| | Weighted annual mean | NA | 2 | ND | 13.885 | 14.635 14.165 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|------------------------------------|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| SPOKANE, WA | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 9.8 | 8.1 | 8.4 | 9 | 6.3 | 5.6 | 5.7 | 5.6 | 5.2 |
| Ozone | 2nd highest daily max | ns | 1 | 0.069 | 0.085 | 0.08 | 0.079 | 0.083 | 0.082 | 0.073 | 0.082 | 0.084 |
| | 4th highest daily max 8-h average | up | 1 | 0.06 | 0.068 | 0.065 | 0.067 | 0.068 | 0.07 | 0.065 | 0.068 | 0.071 |
| PM ₁₀ * | 90th percentile | down | 2 | 71 | 65 | 55.5 | 52 | 48 | 50 | 47 | 47.5 | 45.5 |
| | Weighted annual mean | down | 2 | 39.25 | 36.1 | 29.6 | 30.95 | 28.05 | 28.3 | 26.35 | 27.8 | 27.7 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 30 | 35.5 | 28.4 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 10.26 | 10.95 | 10.12 |
| SPRINGFIELD, IL | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.9 | 3.1 | 3.2 | 3 | 2.1 | 1.9 | 2.4 | 1.7 | 2.8 |
| SO ₂ | 2nd daily max | ns | 1 | 0.04 | 0.05 | 0.062 | 0.061 | 0.043 | 0.061 | 0.059 | 0.035 | 0.028 |
| | Annual mean | ns | 1 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.007 | 0.006 | 0.005 | 0.004 |
| Ozone | 2nd highest daily max | ns | 1 | 0.106 | 0.101 | 0.1 | 0.098 | 0.085 | 0.093 | 0.099 | 0.1 | 0.095 |
| | 4th highest daily max 8-h average | ns | 1 | 0.081 | 0.081 | 0.08 | 0.079 | 0.071 | 0.078 | 0.075 | 0.079 | 0.073 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 38.8 | 32.2 | 33.3 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 15.88 | 13.36 | 13.25 |
| SPRINGFIELD, MO | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.3 | 5.9 | 4.1 | 3.3 | 4.6 | 4 | 3.1 | 2.6 | 2.9 |
| SO ₂ | 2nd daily max | down | 2 | 0.04 | 0.067 | 0.021 | 0.044 | 0.022 | 0.021 | 0.021 | 0.02 | 0.024 |
| | Annual mean | ns | 2 | 0.006 | 0.008 | 0.003 | 0.005 | 0.002 | 0.004 | 0.004 | 0.004 | 0.003 |
| NO ₂ | Annual mean | ns | 1 | 0.011 | 0.013 | 0.012 | 0.011 | 0.011 | 0.012 | 0.013 | 0.012 | 0.013 |
| Ozone | 2nd highest daily max | ns | 2 | 0.075 | 0.093 | 0.098 | 0.086 | 0.08 | 0.09 | 0.094 | 0.088 | 0.089 |
| | 4th highest daily max 8-h average | ns | 2 | 0.069 | 0.072 | 0.079 | 0.074 | 0.066 | 0.071 | 0.078 | 0.076 | 0.072 |
| PM ₁₀ * | 90th percentile | ns | 1 | 30 | 28 | 28 | 26 | 24 | 29 | 28 | 30 | 29 |
| | Weighted annual mean | ns | 1 | 17.5 | 17.6 | 17.3 | 17.9 | 15.4 | 17.5 | 17.5 | 18.4 | 19.8 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 30.4 | 26.7 | 28.5 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.22 | 12.26 | 12.23 |
| SPRINGFIELD, MA | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 2 | 6.1 | 7.5 | 7.9 | 7.1 | 5.1 | 4.1 | 4.8 | 3.8 | 2.95 |
| SO ₂ | 2nd daily max | ns | 1 | 0.026 | 0.041 | 0.031 | 0.027 | 0.02 | 0.019 | 0.019 | 0.023 | 0.022 |
| | Annual mean | ns | 1 | 0.007 | 0.008 | 0.006 | 0.006 | 0.005 | 0.004 | 0.004 | 0.005 | 0.006 |
| NO ₂ | Annual mean | ns | 2 | 0.02 | 0.023 | 0.019 | 0.02 | 0.017 | 0.016 | 0.017 | 0.019 | 0.019 |
| Ozone | 2nd highest daily max | ns | 2 | 0.132 | 0.125 | 0.128 | 0.105 | 0.12 | 0.105 | 0.105 | 0.098 | 0.113 |
| | 4th highest daily max 8-h average | ns | 2 | 0.097 | 0.092 | 0.093 | 0.082 | 0.092 | 0.087 | 0.085 | 0.075 | 0.086 |
| PM ₁₀ * | 90th percentile | ns | 2 | 47.5 | 44 | 38.5 | 41 | 38 | 42.5 | 43.5 | 40.5 | 45 |
| | Weighted annual mean | ns | 2 | 24.75 | 27.25 | 22.65 | 25 | 25.15 | 23.35 | 26.6 | 24.4 | 25.75 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 41.1 | 33.05 | 37.6 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 14.66 | 11.985 | 12.485 |
| STAMFORD-NORWALK, CT | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.2 | 6.2 | 5.4 | 4.1 | 5.1 | 3.8 | 3.8 | 3 | 3.1 |
| SO ₂ | 2nd daily max | ns | 1 | 0.032 | 0.057 | 0.032 | 0.026 | 0.03 | 0.025 | 0.026 | 0.026 | 0.035 |
| | Annual mean | down | 1 | 0.008 | 0.01 | 0.011 | 0.005 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 |
| Ozone | 2nd highest daily max | ns | 1 | 0.145 | 0.155 | 0.136 | 0.121 | 0.142 | 0.113 | 0.143 | 0.123 | 0.13 |
| | 4th highest daily max 8-h average | ns | 1 | 0.101 | 0.107 | 0.102 | 0.093 | 0.101 | 0.089 | 0.107 | 0.084 | 0.098 |
| PM ₁₀ * | 90th percentile | ns | 1 | 44 | 58 | 56 | 50 | 48 | 42 | 44 | 45 | 48 |
| | Weighted annual mean | down | 1 | 29.7 | 36.4 | 32.1 | 32.3 | 31.3 | 28.1 | 28.7 | 30.5 | 28.3 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | 34.85 | 35.95 |
| | Weighted annual mean | NA | 2 | ND | 12.975 | 12.54 |
| STEUBENVILLE-WEIRTON, OH-WV | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 2 | 7.55 | 8.9 | 5.95 | 4.85 | 6.1 | 8.95 | 3.45 | 6.4 | 6.25 |
| | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | down | 4 | 0.12 | 0.125 | 0.063 | 0.056 | 0.054 | 0.045 | 0.056 | 0.047 | 0.043 |
| | Annual mean | ns | 4 | 0.024 | 0.021 | 0.011 | 0.011 | 0.013 | 0.012 | 0.013 | 0.012 | 0.011 |
| Ozone | 2nd highest daily max | ns | 1 | 0.093 | 0.096 | 0.108 | 0.099 | 0.097 | 0.099 | 0.108 | 0.088 | 0.093 |
| | 4th highest daily max 8-h average | ns | 1 | 0.081 | 0.082 | 0.091 | 0.082 | 0.083 | 0.088 | 0.091 | 0.072 | 0.083 |
| PM ₁₀ * | 90th percentile | down | 2 | 75.5 | 77.5 | 66.5 | 69 | 59 | 65 | 54 | 55 | 63 |
| | Weighted annual mean | down | 2 | 39.95 | 40.75 | 37.9 | 36.6 | 31.9 | 33.1 | 29.5 | 30.15 | 30.85 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 42.75 | 46.4 | 45.85 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 18.145 | 18.39 | 17.79 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|---|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| STOCKTON-LODI, CA | | | | | | | | | | | | | |
| CO | Maximum quarterly value | down | 1 | 0.024 | 0.015 | 0.019 | 0.023 | 0.014 | 0.013 | 0.009 | 0.012 | 0.008 | 0.01 |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.1 | 6.4 | 4.4 | 5.3 | 3.4 | 5.3 | 4.5 | 3.7 | 3.6 | 3.2 |
| NO ₂ | Annual mean | down | 1 | 0.024 | 0.024 | 0.022 | 0.023 | 0.022 | 0.023 | 0.024 | 0.021 | 0.019 | 0.021 |
| Ozone | 2nd highest daily max | ns | 2 | 0.11 | 0.12 | 0.125 | 0.101 | 0.094 | 0.108 | 0.12 | 0.103 | 0.102 | 0.099 |
| | 4th highest daily max 8-h average | down | 2 | 0.083 | 0.086 | 0.087 | 0.079 | 0.073 | 0.085 | 0.083 | 0.078 | 0.078 | 0.077 |
| PM ₁₀ * | 90th percentile | ns | 1 | 84 | 63 | 49 | 40 | 47 | 53 | 69 | 60 | 55 | 56 |
| | Weighted annual mean | ns | 1 | 39.1 | 36.9 | 31.4 | 27.4 | 29.7 | 29.1 | 36.4 | 31.5 | 35.8 | 34.9 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 79 | 55 | 58 | 50 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 19.56 | 15.62 | 13.85 | 16.68 |
| SYRACUSE, NY | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.6 | 6.5 | 3.3 | 3.9 | 4 | 3 | 3.1 | 2.4 | 2.2 | 2.1 |
| SO ₂ | 2nd daily max | down | 2 | 0.018 | 0.02 | 0.016 | 0.014 | 0.017 | 0.01 | 0.014 | 0.017 | 0.011 | 0.012 |
| | Annual mean | down | 2 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.003 |
| Ozone | 2nd highest daily max | ns | 2 | 0.097 | 0.095 | 0.1 | 0.085 | 0.096 | 0.093 | 0.092 | 0.083 | 0.096 | 0.1 |
| | 4th highest daily max 8-h average | ns | 2 | 0.083 | 0.077 | 0.086 | 0.073 | 0.078 | 0.082 | 0.084 | 0.074 | 0.084 | 0.088 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | 28.65 | 35.3 | 38.8 |
| | Weighted annual mean | NA | 2 | ND | 11.545 | 11.07 | 11.205 |
| TACOMA, WA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 6 | 6 | 6.3 | 6.3 | 6.8 | 5.8 | 6.6 | 5.5 | 5 | 4.5 |
| PM ₁₀ * | 90th percentile | ns | 1 | 52 | 41 | 43 | 43 | 50 | 35 | 44 | 48 | 38 | 36 |
| | Weighted annual mean | ns | 1 | 28.4 | 23.1 | 26 | 23.1 | 27.4 | 21.1 | 23.1 | 28.4 | 20.5 | 20.8 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 49 | 41.5 | 42.9 |
| | Weighted annual mean | NA | 1 | ND | 13 | 11.39 | 10.56 |
| TALLAHASSEE, FL | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 31.3 | 29.5 | 31.4 | 28.4 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 13.92 | 13.64 | 12.51 | 12.92 |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL MS | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 3.9 | 3.5 | 5 | 3.9 | 3.7 | 4.1 | 3.3 | 3.1 | 3 | 3.8 |
| SO ₂ | 2nd daily max | down | 2 | 0.032 | 0.043 | 0.032 | 0.025 | 0.034 | 0.027 | 0.028 | 0.024 | 0.026 | 0.022 |
| | Annual mean | down | 2 | 0.007 | 0.007 | 0.006 | 0.005 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 |
| NO ₂ | Annual mean | ns | 1 | 0.01 | 0.01 | 0.011 | 0.01 | 0.01 | 0.011 | 0.01 | 0.011 | 0.011 | 0.011 |
| Ozone | 2nd highest daily max | ns | 3 | 0.091 | 0.097 | 0.107 | 0.111 | 0.109 | 0.122 | 0.111 | 0.106 | 0.113 | 0.091 |
| | 4th highest daily max 8-h average | ns | 3 | 0.072 | 0.076 | 0.08 | 0.081 | 0.084 | 0.089 | 0.085 | 0.082 | 0.083 | 0.07 |
| PM ₁₀ * | 90th percentile | ns | 2 | 39 | 40.5 | 46 | 49 | 48.5 | 45.5 | 50.5 | 44.5 | 44 | 37 |
| | Weighted annual mean | ns | 2 | 28.35 | 27.8 | 28.3 | 29.85 | 30.95 | 29.35 | 30 | 29.6 | 27.6 | 24.75 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 24.6 | 30.6 | 27.9 | 22.3 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.92 | 12.39 | 11.7 | 10.75 |
| TERRE HAUTE, IN | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.035 | 0.033 | 0.035 | 0.039 | 0.025 | 0.032 | 0.024 | 0.055 | 0.058 | 0.027 |
| | Annual mean | ns | 1 | 0.011 | 0.012 | 0.01 | 0.012 | 0.006 | 0.01 | 0.007 | 0.012 | 0.01 | 0.007 |
| Ozone | 2nd highest daily max | ns | 1 | 0.088 | 0.106 | 0.099 | 0.112 | 0.096 | 0.099 | 0.093 | 0.088 | 0.096 | 0.096 |
| | 4th highest daily max 8-h average | ns | 1 | 0.074 | 0.094 | 0.085 | 0.098 | 0.083 | 0.084 | 0.082 | 0.075 | 0.082 | 0.082 |
| PM ₁₀ * | 90th percentile | ns | 2 | 48.5 | 42.5 | 53 | 39 | 40.5 | 43 | 45 | 44 | 39.5 | 36 |
| | Weighted annual mean | down | 2 | 28.15 | 27.7 | 29.5 | 24.95 | 24.8 | 26.1 | 24.75 | 24.35 | 21.85 | 21.15 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 34.2 | 38.4 | 40.2 |
| | Weighted annual mean | NA | 1 | ND | 15.72 | 15.18 | 14.55 |
| TEXARKANA, TX-TEXARKANA, AR | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 31 | 29.6 | 35.7 |
| | Weighted annual mean | NA | 1 | ND | 14.68 | 15.09 | 13.21 |
| TOLEDO, OH | | | | | | | | | | | | | |
| CO | Maximum quarterly value | down | 1 | 0.63 | 0.7 | 0.43 | 0.437 | 0.417 | 0.35 | 0.263 | 0.33 | 0.273 | 0.13 |
| SO ₂ | 2nd daily max | ns | 1 | 0.025 | 0.056 | 0.024 | 0.014 | 0.021 | 0.021 | 0.052 | 0.017 | 0.02 | 0.026 |
| | Annual mean | ns | 1 | 0.006 | 0.007 | 0.004 | 0.003 | 0.003 | 0.004 | 0.009 | 0.005 | 0.006 | 0.007 |
| Ozone | 2nd highest daily max | ns | 2 | 0.117 | 0.115 | 0.108 | 0.111 | 0.105 | 0.106 | 0.119 | 0.094 | 0.109 | 0.114 |
| | 4th highest daily max 8-h average | ns | 2 | 0.089 | 0.09 | 0.09 | 0.092 | 0.085 | 0.086 | 0.085 | 0.08 | 0.092 | 0.095 |
| PM ₁₀ * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 41 | 38.575 | 35.85 | 38.15 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 15.56 | 15.388 | 14.745 | 15.115 |
| TOPEKA, KS | | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 26.1 | 23.5 | 22.8 | 29.1 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.32 | 10.73 | 10.71 | 11.14 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| VICTORIA, TX | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.098 | 0.094 | 0.104 | 0.087 | 0.092 | 0.093 | 0.102 | 0.094 | 0.085 |
| | 4th highest daily max 8-h average | ns | 1 | 0.081 | 0.075 | 0.087 | 0.071 | 0.078 | 0.073 | 0.086 | 0.079 | 0.073 |
| VINELAND-MILLVILLE-BRIDGETON, NJ PMS | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.019 | 0.032 | 0.016 | 0.016 | 0.018 | 0.012 | 0.012 | 0.017 | 0.021 |
| | Annual mean | down | 1 | 0.006 | 0.005 | 0.004 | 0.005 | 0.004 | 0.004 | 0.003 | 0.004 | 0.004 |
| Ozone | 2nd highest daily max | ns | 1 | 0.121 | 0.102 | 0.126 | 0.105 | 0.115 | 0.117 | 0.117 | 0.117 | 0.129 |
| | 4th highest daily max 8-h average | ns | 1 | 0.103 | 0.086 | 0.091 | 0.086 | 0.104 | 0.098 | 0.096 | 0.094 | 0.101 |
| VISALIA-TULARE-PORTERVILLE, CA | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.5 | 4 | 4.2 | 3.9 | 3.5 | 3.6 | 3.9 | 3.3 | 3.2 |
| NO ₂ | Annual mean | ns | 1 | 0.023 | 0.023 | 0.023 | 0.018 | 0.019 | 0.017 | 0.021 | 0.018 | 0.018 |
| Ozone | 2nd highest daily max | down | 2 | 0.138 | 0.137 | 0.118 | 0.131 | 0.114 | 0.13 | 0.116 | 0.111 | 0.117 |
| | 4th highest daily max 8-h average | ns | 2 | 0.107 | 0.108 | 0.1 | 0.104 | 0.096 | 0.102 | 0.099 | 0.095 | 0.098 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 114 | 103 | 96 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 27.6 | 23.92 | 22.49 |
| WASHINGTON, DC-MD-VA-WV | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 2 | 5.6 | 5.3 | 4.95 | 4.1 | 4.4 | 3.45 | 4.7 | 3.85 | 3.6 |
| SO ₂ | 2nd daily max | ns | 2 | 0.023 | 0.03 | 0.021 | 0.036 | 0.023 | 0.021 | 0.022 | 0.022 | 0.024 |
| | Annual mean | down | 2 | 0.008 | 0.009 | 0.008 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.006 |
| NO ₂ | Annual mean | ns | 4 | 0.027 | 0.027 | 0.023 | 0.024 | 0.023 | 0.024 | 0.023 | 0.022 | 0.024 |
| Ozone | 2nd highest daily max | ns | 3 | 0.127 | 0.127 | 0.12 | 0.109 | 0.127 | 0.113 | 0.126 | 0.11 | 0.121 |
| | 4th highest daily max 8-h average | ns | 3 | 0.099 | 0.09 | 0.097 | 0.083 | 0.093 | 0.097 | 0.099 | 0.081 | 0.096 |
| PM _{2.5} * | 98th percentile | NA | 4 | ND | 37.4 | 39.725 |
| | Weighted annual mean | NA | 4 | ND | 15.145 | 15.523 |
| WATERBURY, CT | | | | | | | | | | | | |
| | Maximum quarterly value | ns | 1 | 0.02 | 0.017 | 0.037 | 0.033 | 0.025 | 0.017 | 0.01 | 0.017 | 0.013 |
| SO ₂ | 2nd daily max | ns | 1 | 0.021 | 0.03 | 0.019 | 0.022 | 0.02 | 0.021 | 0.02 | 0.017 | 0.018 |
| | Annual mean | down | 1 | 0.006 | 0.007 | 0.005 | 0.005 | 0.005 | 0.006 | 0.005 | 0.004 | 0.004 |
| PM ₁₀ * | 90th percentile | down | 1 | 43 | 41 | 37 | 45 | 36 | 32 | 32 | 30 | 35 |
| | Weighted annual mean | down | 1 | 22.6 | 25.1 | 23.6 | 25.4 | 23.3 | 21.6 | 19.2 | 19.9 | 19.8 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 38.4 | 34.4 | 35.4 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 13.22 | 13.56 | 13.97 |
| WATERLOO-CEDAR FALLS, IA | | | | | | | | | | | | |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 30.3 | 28.7 | 30.2 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.05 | 11.37 | 11.8 |
| WAUSAU, WI | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.081 | 0.077 | 0.088 | 0.079 | 0.08 | 0.098 | 0.095 | 0.081 | 0.078 |
| | 4th highest daily max 8-h average | ns | 1 | 0.066 | 0.064 | 0.075 | 0.07 | 0.068 | 0.077 | 0.084 | 0.073 | 0.072 |
| WEST PALM BEACH-BOCA RATON, FL | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.1 | 2.8 | 2.8 | 2.5 | 3.5 | 2.5 | 2.8 | 2.7 | 2.2 |
| SO ₂ | 2nd daily max | down | 1 | 0.028 | 0.016 | 0.019 | 0.014 | 0.013 | 0.004 | 0.013 | 0.008 | 0.003 |
| | Annual mean | down | 1 | 0.004 | 0.003 | 0.002 | 0.002 | 0.002 | 0.001 | 0.002 | 0.002 | 0.001 |
| NO ₂ | Annual mean | up | 1 | 0.013 | 0.012 | 0.012 | 0.013 | 0.013 | 0.013 | 0.014 | 0.016 | 0.017 |
| PM ₁₀ * | 90th percentile | ns | 1 | 30 | 30 | 30 | 42 | 34 | 34 | 30 | 30 | 24 |
| | Weighted annual mean | ns | 1 | 18.6 | 18.6 | 18.6 | 22.6 | 20.4 | 25.7 | 19 | 19.4 | 19.7 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | 26.9 | 18 |
| | Weighted annual mean | NA | 1 | ND | 9.37 | 7.69 |
| WHEELING, WV-OH | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 4.1 | 4.6 | 5 | 3.5 | 3.1 | 3.5 | 3 | 2.3 | 1.9 |
| SO ₂ | 2nd daily max | down | 2 | 0.064 | 0.067 | 0.061 | 0.059 | 0.048 | 0.051 | 0.047 | 0.043 | 0.04 |
| | Annual mean | down | 2 | 0.018 | 0.016 | 0.013 | 0.012 | 0.012 | 0.013 | 0.012 | 0.011 | 0.01 |
| Ozone | 2nd highest daily max | ns | 1 | 0.11 | 0.095 | 0.104 | 0.105 | 0.11 | 0.104 | 0.1 | 0.093 | 0.104 |
| | 4th highest daily max 8-h average | ns | 1 | 0.077 | 0.078 | 0.089 | 0.087 | 0.082 | 0.087 | 0.088 | 0.071 | 0.088 |
| PM ₁₀ * | 90th percentile | down | 1 | 49 | 46 | 45 | 38 | 40 | 45 | 43 | 39 | 41 |
| | Weighted annual mean | down | 1 | 27.5 | 27 | 27.7 | 27 | 23.2 | 24.8 | 25.1 | 23.2 | 24 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 36.15 | 34.45 | 37.75 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 16.51 | 15.88 | 15.8 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|---------------------------------|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| WICHITA, KS | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5.6 | 6.5 | 5.4 | 6.1 | 5.3 | 5.3 | 4.5 | 3.7 | 4.1 | 3.7 |
| Ozone | 2nd highest daily max | ns | 1 | 0.08 | 0.08 | 0.09 | 0.095 | 0.092 | 0.1 | 0.095 | 0.093 | 0.096 | 0.092 |
| | 4th highest daily max 8-h average | up | 1 | 0.059 | 0.067 | 0.069 | 0.074 | 0.079 | 0.083 | 0.079 | 0.08 | 0.084 | 0.079 |
| PM ₁₀ * | 90th percentile | down | 1 | 54 | 42 | 50 | 43 | 39 | 46 | 38 | 38 | 36 | 37 |
| | Weighted annual mean | down | 1 | 32.6 | 24.6 | 26 | 25.8 | 21.8 | 25.2 | 23.2 | 21.7 | 22.2 | 21.6 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 25.75 | 25.85 | 25 | 27.9 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 12.205 | 11.695 | 11.18 | 10.76 |
| WILMINGTON-NEWARK, DE-MD | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | ns | 1 | 1.7 | 1.7 | 1.5 | 1.6 | 1.1 | 1.3 | 1.4 | 1.6 | 1.6 | 1.2 |
| SO ₂ | 2nd daily max | down | 1 | 0.06 | 0.056 | 0.098 | 0.067 | 0.057 | 0.044 | 0.049 | 0.047 | 0.043 | 0.054 |
| | Annual mean | down | 1 | 0.012 | 0.011 | 0.013 | 0.011 | 0.01 | 0.008 | 0.008 | 0.006 | 0.006 | 0.006 |
| Ozone | 2nd highest daily max | ns | 2 | 0.118 | 0.108 | 0.136 | 0.108 | 0.124 | 0.118 | 0.128 | 0.115 | 0.112 | 0.132 |
| | 4th highest daily max 8-h average | ns | 2 | 0.086 | 0.082 | 0.105 | 0.085 | 0.093 | 0.093 | 0.1 | 0.09 | 0.092 | 0.101 |
| PM _{2.5} * | 98th percentile | NA | 3 | ND | ND | ND | ND | ND | ND | 35.35 | 39.1 | 41.133 | 36.633 |
| | Weighted annual mean | NA | 3 | ND | ND | ND | ND | ND | ND | 15.135 | 15.783 | 16.29 | 14.297 |
| WILMINGTON, NC | | | | | | | | | | | | | |
| SO ₂ | 2nd daily max | ns | 1 | 0.063 | 0.063 | 0.063 | 0.036 | 0.028 | 0.026 | 0.027 | 0.03 | 0.039 | 0.04 |
| | Annual mean | down | 1 | 0.009 | 0.009 | 0.009 | 0.007 | 0.007 | 0.007 | 0.007 | 0.006 | 0.006 | 0.007 |
| Ozone | 2nd highest daily max | down | 1 | 0.104 | 0.104 | 0.097 | 0.09 | 0.102 | 0.102 | 0.081 | 0.097 | 0.089 | 0.091 |
| | 4th highest daily max 8-h average | ns | 1 | 0.081 | 0.081 | 0.079 | 0.076 | 0.083 | 0.086 | 0.067 | 0.08 | 0.078 | 0.08 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 37.4 | 28 | 25.4 | 22.9 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 12.81 | 12.48 | 11.49 | 10.36 |
| WORCESTER, MA-CT | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 6.1 | 5.9 | 4.2 | 5.3 | 3.4 | 3.5 | 3.3 | 2.6 | 2.6 | 2.9 |
| SO ₂ | 2nd daily max | down | 1 | 0.025 | 0.024 | 0.023 | 0.021 | 0.021 | 0.017 | 0.013 | 0.019 | 0.022 | 0.018 |
| | Annual mean | ns | 1 | 0.007 | 0.008 | 0.006 | 0.005 | 0.004 | 0.005 | 0.004 | 0.006 | 0.005 | 0.005 |
| NO ₂ | Annual mean | down | 1 | 0.028 | 0.025 | 0.021 | 0.019 | 0.019 | 0.019 | 0.02 | 0.018 | 0.02 | 0.017 |
| Ozone | 2nd highest daily max | ns | 1 | 0.155 | 0.125 | 0.118 | 0.091 | 0.106 | 0.124 | 0.113 | 0.098 | 0.118 | 0.127 |
| | 4th highest daily max 8-h average | ns | 1 | 0.092 | 0.097 | 0.096 | 0.074 | 0.092 | 0.097 | 0.093 | 0.076 | 0.088 | 0.091 |
| PM ₁₀ * | 90th percentile | down | 1 | 37 | 35 | 32 | 29 | 34 | 27 | 34 | 31 | 30 | 30 |
| | Weighted annual mean | down | 1 | 20.3 | 20.3 | 20.1 | 19.1 | 20.3 | 18.2 | 20.8 | 19 | 17.7 | 15.3 |
| PM _{2.5} * | 98th percentile | NA | 2 | ND | ND | ND | ND | ND | ND | 35.5 | 29.55 | 34.75 | 37.5 |
| | Weighted annual mean | NA | 2 | ND | ND | ND | ND | ND | ND | 13.34 | 11.955 | 13.01 | 11.23 |
| YOLO, CA | | | | | | | | | | | | | |
| Ozone | 2nd highest daily max | ns | 1 | 0.09 | 0.097 | 0.108 | 0.113 | 0.092 | 0.109 | 0.115 | 0.101 | 0.099 | 0.104 |
| | 4th highest daily max 8-h average | ns | 1 | 0.076 | 0.076 | 0.083 | 0.087 | 0.068 | 0.087 | 0.088 | 0.08 | 0.075 | 0.076 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 56 | 38 | 35 | 31 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 16.29 | 10.25 | 10.39 | 10.72 |
| YORK, PA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 3.3 | 3.9 | 2.7 | 2.8 | 3.4 | 2.4 | 2.4 | 1.8 | 2.2 | 2.2 |
| SO ₂ | 2nd daily max | down | 1 | 0.032 | 0.041 | 0.02 | 0.022 | 0.026 | 0.023 | 0.019 | 0.02 | 0.019 | 0.014 |
| | Annual mean | ns | 1 | 0.008 | 0.009 | 0.006 | 0.007 | 0.009 | 0.008 | 0.007 | 0.006 | 0.006 | 0.005 |
| NO ₂ | Annual mean | down | 1 | 0.022 | 0.024 | 0.021 | 0.021 | 0.019 | 0.019 | 0.019 | 0.018 | 0.02 | 0.017 |
| Ozone | 2nd highest daily max | ns | 1 | 0.112 | 0.115 | 0.097 | 0.098 | 0.109 | 0.112 | 0.121 | 0.112 | 0.104 | 0.124 |
| | 4th highest daily max 8-h average | ns | 1 | 0.09 | 0.082 | 0.086 | 0.081 | 0.094 | 0.095 | 0.094 | 0.09 | 0.087 | 0.101 |
| PM ₁₀ * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 34.9 | 41.1 | 41.3 | 47.3 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 15.4 | 16.55 | 16.62 | 17.09 |
| YOUNGSTOWN-WARREN, OH | | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | down | 1 | 48 | 46 | 53 | 37 | 41 | 45 | 40 | 40 | 33 | 39 |
| | Weighted annual mean | down | 1 | 25.9 | 29.3 | 32.5 | 26.2 | 24.8 | 26.5 | 24.7 | 25.5 | 22.7 | 22.1 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 38.6 | 34.6 | 44.8 | 38.3 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 16.94 | 15.97 | 16.36 | 14.75 |

Table A-16. Metropolitan Statistical Area Air Quality Trends, 1993–2002 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|-------------------------------|-------------------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| YUBA CITY, CA | | | | | | | | | | | | | |
| CO | 2nd max (daily-non-overlapping 8-h) | down | 1 | 5 | 5.6 | 4.1 | 4.1 | 3.9 | 3.9 | 4.2 | 3.6 | 3.4 | 3.2 |
| NO ₂ | Annual mean | ns | 1 | 0.018 | 0.016 | 0.014 | 0.013 | 0.014 | 0.013 | 0.014 | 0.013 | 0.014 | 0.015 |
| Ozone | 2nd highest daily max | ns | 1 | 0.09 | 0.107 | 0.102 | 0.108 | 0.09 | 0.102 | 0.103 | 0.097 | 0.099 | 0.101 |
| | 4th highest daily max 8-h average | ns | 1 | 0.078 | 0.089 | 0.085 | 0.085 | 0.072 | 0.088 | 0.083 | 0.079 | 0.081 | 0.08 |
| PM ₁₀ * | 90th percentile | ns | 1 | 59 | 51 | 68 | 50 | 48 | 44 | 68 | 40 | 52 | 49 |
| | Weighted annual mean | ns | 1 | 30.4 | 34.1 | 32.2 | 29.2 | 28.6 | 23.1 | 38.4 | 27.9 | 29 | 30.4 |
| PM _{2.5} * | 98th percentile | NA | 1 | ND | ND | ND | ND | ND | ND | 53 | 37 | 54 | 35 |
| | Weighted annual mean | NA | 1 | ND | ND | ND | ND | ND | ND | 15.85 | 11.46 | 11.79 | 12.64 |
| YUMA, AZ | | | | | | | | | | | | | |
| PM ₁₀ * | 90th percentile | up | 1 | 50 | 51 | 67 | 52 | 62 | 75 | 59 | 68 | 84.5 | 101 |
| | Weighted annual mean | up | 1 | 31.8 | 31.1 | 35.1 | 37.1 | 36.6 | 40.1 | 35.2 | 42.3 | 45.1 | 47.9 |

CO = Highest second maximum non-overlapping 8-hour concentration (*Applicable NAAQS is 9 ppm*)Pb = Highest quarterly maximum concentration (*Applicable NAAQS is 1.5 µg/m³*)NO₂ = Highest arithmetic mean concentration (*Applicable NAAQS is 0.053 ppm*)PM₁₀ = Highest second maximum 24-hour concentration (*Applicable NAAQS is 150 µg/m³*)SO₂ = Highest second maximum 24-hour concentration (*Applicable NAAQS is 0.14 ppm*)

ppm = Units are parts per million

µg/m³ = Units are micrograms per cubic meter*PM_{2.5} does not have enough years to assess trends.